

TVR/COAI/121  
6 July 2007

**The Telecom Regulatory Authority of India**  
Mahanagar Doorsanchar Bhawan  
Jawahar Lal Nehru Marg (Old Minto Road)  
Next to Zakir Hussain College  
New Delhi – 110002

Dear Sirs,

**COAI Response to TRAI Consultation Paper (No.7/2007) on Review of license terms and conditions and capping of number of access providers**

Please find enclosed the COAI's response to the above Consultation Paper issued by the Authority.

We hope that our submissions will merit your kind consideration and support.

Kind regards,

Sincerely yours,

**T. V. Ramachandran**  
**Director General**

**Cc : Shri Nripendra Misra, Chairman, TRAI**  
**: Shri A. K. Sawhney, Member, TRAI**  
**: Shri R. N.Prabhakar, Member, TRAI**  
**: Prof. N. Balakrishnan, Member, TRAI**  
**: Dr. Rajiv Kumar, Member, TRAI**  
**: Shri R.K.Arnold, Secretary, TRAI**  
**: Shri Lav Gupta, Pr. Advisor (FN)**  
**: Shri Sudhir Gupta, Advisor (MN), TRAI**  
**: Dr. M. Kannan, Advisor (Eco), TRAI**  
**: Shri S.K.Gupta, Advisor (CN), TRAI**  
**: Shri M. C. Chaube, Advisor (QOS), TRAI**

## **COAI Response to TRAI Consultation Paper on Review of license terms and conditions and capping of number of access providers**

### **INTRODUCTION**

1. At the outset, the **COAI warmly compliments the Authority on a very comprehensive Consultation Paper** which has transparently surfaced some very pertinent and important issues that have a bearing on the overall attractiveness and healthy future growth of the sector and has the potential to put in place the Policy and Regulatory framework to launch the next generation of reforms.
2. However, we would like to request that while addressing the issues raised in the consultation, the Authority may most kindly keep in mind its mandate under the Act which charges the Authority with the responsibility to *“protect the interest of service providers and consumers of the telecom sector, to promote and ensure orderly growth of the telecom sector...”*
3. In this regard, it is submitted that the interests of the consumers can only be ensured if the sector grows in an orderly manner and the economic health of the service providers is ensured. This is also vital to facilitate the inflow of the huge investments that are necessary for network expansion and rollout in order to meet the national telecom target of 500 million subscribers by 2010.
4. The Authority has recognized that the mobile industry has delivered a commendable performance for the last several years. It is also universally acknowledged that it is the mobile industry that contributed to transforming the Indian telecom landscape and making India one of the fastest growing and most competitive markets in the world.
5. It is universally accepted and also demonstrated by various international studies that there is a strong link between the growth of tele density and the economic and GDP benefits delivered to the nation.
6. It may however be appreciated that there is still however an enormous task before us in terms of
  - a. **expanding geographic coverage** – at present we have managed to cover only around 40% of the geographic land mass and the balance 60% still needs to be covered
  - b. **reaching out to the population in the rural and remote areas** – we have reached out to around 60% of the population. The balance 40% of the population have still to avail of the benefits of world class connectivity.
  - c. **Delivering world class voice and data services** - to India's huge population that resides in the remote and far flung areas.
7. The Authority has noted (Para 6.20) that the average population base per network in some developed countries ranges from 6.8 million in the case of UK and 42.5 million in the case of Japan. In India, it may be noted that each service area is the equivalent of a country and given that there are 6-8 mobile operators in every service area, the average population base per network is far, far smaller, varying from less than 1 million per operator in the case of Himachal Pradesh and Chennai and around 14 million per operator in Bihar and Maharashtra.

8. In this context, the Authority has rightly noted (Para 6.19) that *“Operating in the telecommunication sector requires significant upfront initial capital investments and the gestation time to recoup investments is long. Therefore, **sound business and economic case would demand that licensees have sufficient market share in terms of number of subscribers to get adequate rate of return on investments.**”*
9. The Indian telecom sector thus needs to be carefully nurtured to attract the huge investments that are required to deliver the national telecom target of 500 million subscribers by 2010.
10. In this context, we believe that one of the most important factors that will determine the success and growth of the industry pertains to the timely availability of adequate spectrum to fuel the rollout and growth of networks.
11. It is submitted that whilst the spectrum allotment guidelines provide for spectrum upto 15MHz for GSM operators, the actual allotments are far below the eligibility levels. The Authority has itself recognized (Para 6.42) that the spectrum requirements of the existing operators in various service areas is more than the existing available spectrum. Moreover, it has also been noted (Para 6.43) that even the 20MHz spectrum, which is likely to be released by Defence, will meet the requirement of the existing operators only upto December 2007
12. Thus, having laid down a target of 500 million subscribers by 2010, it is equally important to also have a clear roadmap on the availability of spectrum to meet this objective / target. It is estimated that the total spectrum requirements of the industry will be to the tune of at least around 90 MHz spectrum by 2010. With this spectrum, it is estimated that the mobile industry alone will be able to achieve a subscriber base of 550-575 million subscribers by 2010. A clear-cut roadmap on spectrum will enable to Government to plan the vacation and coordination of spectrum and also allow the operators to plan the growth of the networks
13. The Authority too is aware of this imperative as it has noted (Para 6.49) that the Authority should strive to provide transparency in terms of spectrum availability, nature of frequency bands, etc.
14. The Authority has rightly noted (Para 1.10) that *“**competition and steady subscriber growth by itself may not be sufficient to guarantee that the Indian telecom market will sustain the same phenomenal growth in the changed market scenario, thus making Regulatory and Policy intervention imperative to provide impetus at the right time. From the perspective of the cellular telephony market, there is a need to ensure a clear and stable regulatory structure, especially with regard to spectrum policy, investment norms, competition policy, and the licensing regime in the era of convergence. It is no doubt important to ensure that the regulatory framework is pre-defined and transparent to reduce risk and maximize the potential for growth.**”*
15. It is submitted that any measures that create uncertainty in the market can have a disastrous impact at this stage and could jeopardize not only the health and robust growth of the industry but also impact irreversibly the industry’s ability to contribute to national telecom objectives.
16. We would like to urge that the Authority may take into account our above submissions while considering the issues raised in the present consultation.

## ISSUES FOR CONSULTATION

### MERGER AND ACQUISITION

#### **Q1. How should the market in the access segment be defined (see ¶2.22)?**

- a. We believe that the **market in the access segment should continue to be classified separately as fixed and mobile**. It is further submitted that **as this market is being defined narrowly, the permissible level of market share for a merged entity should continue to be prescribed at 67%**.
- b. Our reasons and justifications in support of the above answer are as under :
- i. The **fixed and mobile markets are not perfect demand substitutes** for each other as the usage profile and requirements of the two sets of subscribers are not the same. This has been recorded by TRAI in Para 2.22 of its Consultation Paper.
  - ii. The **aggressive growth is taking place in the mobile segment** while the growth in the fixed line is marginal. It may also be noted that the private access operators are growing predominantly in mobile segment. Going forward too, the growth is expected to come primarily from the mobile industry. In this context, it must be the **objective of M&A to determine whether the merged entity is able to exercise monopoly market power in the relevant segment**.
  - iii. While **there may be a growing interest in fixed-mobile convergence** as recorded by the Authority, it is submitted that **this is still not a reality**. Thus, it is desirable and warranted that for the present, the fixed and mobile markets should be classified separately and that this position may be reviewed later with the onset of fixed-mobile convergence.
  - iv. **If the market is defined as the entire access market**, then as noted by the Authority, there could be other problems in determining the dominance of the merged entity.
- c. We also agree that the **mobile segment should comprise of cellular mobile & WLL(M) subscribers while fixed line should comprise fixed line and fixed wireless subscribers**.

#### **Q2. Whether subscriber base as the criteria for computing market share of a service provider in a service area be taken for determining the dominance adversely affecting competition, If yes, then should the subscriber base take into consideration home location register (HLR) or visited location register (VLR) data? Please provide the reasons in support of your answer?**

- a. **Yes, subscriber base should continue to be taken as the criterion for computing market share of a service provider in a service area for the purpose of determining dominance**.
- b. Further, the **subscriber base should continue to be considered as per the existing Government definition, which is based on Home Location Register (in the case of mobile subscribers) and Exchange Data Record (in case of fixed line subscribers). Reference to VLR subscribers is not relevant in the present context and should not**

be used as the criterion for computing the number of subscribers for determining market share.

**Q3. As per the existing guidelines, any merger/acquisition that leads to a market share of 67% or more, of the merged entity, is not permitted. Keeping in mind, our objective and the present and expected market conditions, what should be the permissible level of market share of the merged entity? Please provide justifications for your reply?**

- a. It is submitted that in light of the fact that the market is being defined separately as fixed and mobile separately, we believe that the **permissible level of market share for a merged company should continue to be prescribed at 67%.**
- b. The **reference to lower levels of market share** being used **internationally to indicate dominance is not of much relevance in the Indian context** as the **competitive scenario in India is very different** from what is prevalent internationally.
- c. The international practice is usually 3-4 mobile operators. In contrast, India has **at least 6-8 mobile operators in every service area** and the sector can be said to be intensely, competitive. It is thus submitted that, as long as there is adequate competition in the sector, there should be **little apprehension about the market share of the merged entity.** In fact the Authority has itself noted in Para 2.34 of its Consultation Paper that a high market share does not necessarily infer market power.
- d. In this context it may also be noted that **we have suggested that the lower limit of three operators** prescribed under the present guidelines **should be continued with.**
- e. In respect of the Authority's view that the existing limit needs to be reviewed keeping in mind the possibility of merger & acquisitions in future (Para 2.41), it is submitted that the **limit may be reviewed and international limits prescribed when the competitive scenario in India is similar to that in other international regimes.**

**Q4. Should the maximum spectrum limit that could be held by a merged entity be specified?**

**a. If yes, what should be the limit? Should this limit be different for mergers amongst GSM/GSM, CDMA/CDMA & GSM/CDMA operators? If yes, please specify the respective limits?**

**b. If no, give reasons in view of effective utilisation of scarce spectrum resource?**

- a. It is first submitted that **the existing M&A guidelines (Clause 6) already provide that, "consequent upon the merger of licenses, the merged entity shall be entitled to the total amount of spectrum held by the merging entities, subject to the condition that after merger, the amount of spectrum shall not exceed 15MHz per operator per service area for Metros and category 'A' Service Areas, and 12.4 MHz per operator per service area in category 'B' and category 'C' Service Areas. Subject to these limits, the merged spectrum will remain with the merged entity and would be treated as a starting point for further allocation and revision, as per the detailed Spectrum Guidelines to be issued separately."**
- b. In this regard, however, it **may be appreciated that the earlier limit of 15 MHz** on spectrum was **prescribed when the maximum spectrum allotted to any individual GSM operator was only 10 MHz.** However, **now the roadmap has been extended and**

now **each individual operator is entitled to receive as much as 15 MHz spectrum upon achieving pre-defined subscriber milestones.**

- c. Under these circumstances **to apply the same limit of 15 MHz to M&A as is applicable to an individual operator** would be incorrect and **would deter any M&A activity from taking place.** To illustrate, take two operators with 15 MHz spectrum, it is evident that each has a subscriber base that is large enough to merit the spectrum allotment of 15 MHz, i.e. at least 21 lakhs per operator. If these operators were to consider a merger in the existing regime, then the merged entity would actually have to surrender 15 MHz spectrum and serve a huge subscriber base, of over 42 lakhs on only 15 MHz spectrum. This, being an impossibility, would completely deter any mergers from taking place.
- d. It is therefore **important that the review of the M&A guidelines should take into account the new circumstances and prescribe a higher maximum spectrum limit under M&A.**
  - a. It is thus submitted that the **maximum spectrum limit** that can be held by a merged entity **must continue to be specified. However, this maximum limit should be reviewed upwards on a proportionate basis.** In this context, **keeping in view the earlier linkages**, where a maximum limit of 15MHz was prescribed when individual allotments were only 10 MHz, similarly, given that individual allotments are now prescribed till 15 MHz for all service areas, **the revised maximum spectrum limit under M&A for GSM may be prescribed at 22.5 MHz.**
  - b. Furthermore **organic growth must not be disadvantaged** and this **revised spectrum limit** should be **applicable to all operators and not just the merging entities. This will ensure level playing field.**
  - c. It may be noted that **this limit would also be more in line with the international best practices** in spectrum allotment to GSM, where the average spectrum allotted to a GSM operator is 25 MHz. A copy of the international best practices in spectrum allotment is attached as [Annexure-1](#)
  - d. It may however be clarified that the **existing spectrum cap of 15 MHz as also the suggested revised cap of 22.5 MHz spectrum pertains to 2G spectrum only.** It is submitted that the **spectrum limits would need to be further revised to include BWA and 3G spectrum** once there is clarity on the spectrum allotments in this regard.
  - e. We have noted that when spectrum caps were prescribed in US and Canada, the limits were as high as 45-55MHz **spectrum. We have also noted that the caps were withdrawn in 2003 and 2004 in US and Canada respectively and that subsequently in a merger between Cingular Wireless and AT&T, the merged entity was permitted to keep as much as 80MHz spectrum** in some areas. (Paras 2.47 & 2.48). We have also noted that spectrum caps have been removed once the market has matured sufficiently. In this regard, we agree with the views of the Authority (Para 2.49) that the **Indian market has not sufficiently matured to a point where spectrum caps can be removed completely**, but we do believe that there is a **very strong case for an upward revision of the maximum spectrum limit.**
  - f. It is further submitted that **this cap should be uniformly applicable to all service areas** and not be applied separately to Metro, A, B and C service areas, as is the case at present. This is **because the roadmap of upto 15 MHz for GSM has been prescribed for every service area.**

- g. We are also strongly of the view that this **limit should be separately prescribed for mergers between GSM/GSM and for mergers between CDMA/CDMA.**
- h. In this context, it is submitted that **the earlier guidelines while capping the maximum spectrum limit at 15 MHz, created a very serious anomaly** by not prescribing separate spectrum caps for GSM and CDMA **especially in view of the fact that the spectrum allocation guidelines prescribed by the Government** itself follow a technology sensitive approach and **apply a ratio of 1:2 for allotment of CDMA and GSM spectrum.**
- i. The **severity of the anomaly** can be judged from the fact that at the time the M&A guidelines were introduced, the maximum permissible spectrum for any CDMA operator was 5MHz. Thus the M&A guidelines in effect would have permitted **as many as 3 CDMA operators to merge and still keep their full spectrum.** This is a serious and unintentional anomaly in the existing guidelines that needs to be corrected without any further delay.
- j. It thus submitted that it is **completely incorrect and unfair to apply the same spectrum limit to both technologies /standards.** It is submitted that **this limit must be prescribed separately for CDMA and GSM and must follow the ratio of 1:2** prescribed and adopted by the Government in its spectrum allotment criteria.
- k. Having submitted that the maximum spectrum limit should be prescribed separately for GSM and CDMA in the ratio of 1:2, it is further submitted that **in the case of a cross technology merger between GSM/CDMA, the merged entity must be required to choose its technology path and it cannot follow two growth paths under the same license / entity.**
- l. This would be **in consonance with the present policy and licensing regime** of the Government which **does not permit the licensee to hold both GSM and CDMA spectrum** under the same license.
- m. This has **also been the practice followed by the Government ever since the inception of licensing.** This is evident from the following :
  - i. **In 1994-95** when the first cellular licenses were issued, **GSM was the mandated technology** and CDMA was used by the fixed service operators to offer fixed wireless services.
  - ii. In 1999 **when technology neutrality was announced** and a GSM service provider **applied for CDMA spectrum**, the said application was **rejected on the grounds** that the **operators were technology neutral only within their allocated spectrum.**
  - iii. Furthermore, even when the **UAS licensing regime** was introduced in 2003, operators were allowed to **migrate to UASL only with their allocated / contracted spectrum.**
  - iv. Even **pursuant to UASL, cross technology holdings were not permitted** to a single licensed entity. This was demonstrated in the **case of M/s Bharti Airtel in Madhya Pradesh** as when the company migrated to UASL for both its CMTS as well as BSO licenses, and subsequently surrendered its UABSO license. At the time, it was the **clear understanding of both the company as well as the Government** that it would be **required to surrender its CDMA spectrum.** The **company wanted** a period of **three years** whilst the **Government was willing to grant it only one year** to migrate its CDMA subscribers to its GSM platform. It may be noted that this

was done **despite the fact that the company actually had paid an entry fee and had both an operating network as well as subscribers on its CDMA platform.** It is thus clear that the **existing policy and licensing regime does not permit the licensee to hold spectrum of both technologies under a single license.** It is also pertinent to note that **despite the surrender of license and also the surrender of spectrum, the entry fee was not refunded** to the company.

- n. **In light of the above clear precedents and in consonance with the prevalent policy and licensing regime,** we believe that **in the event of a cross technology merger, before approving the merger, the merged entity must be required to make a technology choice** at the outset, but **may be given some time** by the Licensor to migrate all subscribers to its chosen platform.

**Q5. Should there be a lower limit on the number of access service providers in a service area in the context of M&A activity? What should this be, and how should it be defined?**

- a. Yes. We believe that the **lower limit of three operators prescribed under the present guidelines should be continued** with.

**Q6. What are the qualitative or quantitative conditions, in terms of review of potential mergers or acquisitions and transfers of licenses, which should be in place to ensure healthy competition in the market?**

- a. It is submitted that **this question is too wide ranging and open-ended in scope** for us to provide **comprehensive inputs, especially in the short time period** available to us. It is therefore **suggested that the Authority may consider coming out with draft recommendations** on M&A to enable us to address the issues in a focused manner.
- b. However, based on the information given in the Consultation Paper, we can suggest that the **Authority too, like OFTA carry out a competition analysis of the market** based on factors given in Para 2.65 of its Consultation Paper, viz., level of market concentration, ability of operators to significantly increase price or profit margins, etc. This information will be relevant for reviewing / prescribing the terms and conditions relating to M&A.
- c. It is also submitted that the **key criteria that the M&A guidelines must consider include** inter alia
- i. Treatment of fixed and mobile markets separately for the purpose of judging dominance of the merged entity
  - ii. Ensuring that the market share of the merged entity does not exceed 67% of the relevant market.
  - iii. That subscriber base will continue to be the criteria for calculating market share
  - iv. That the subscriber base will be calculated on the basis of HLR for mobile subscribers and EDR for fixed line subscribers
  - v. Ensuring that the M&A does not lead to less than three service providers in the service area
  - vi. Applying separate spectrum caps for mergers between GSM/GSM and CDMA/CDMA
  - vii. That the spectrum caps should be uniformly applicable across all service areas.
  - viii. Allowing the merged entity to keep the total spectrum subject to the above spectrum caps.

- ix. Clarifying that in the event of a cross technology merger (GSM/CDMA), the merged entity will have to make its technology choice at the outset and that it would not be allowed to follow two separate growth paths
- x. Prescribing the time period that may be given to the merged entity to migrate all its subscribers to its chosen platform.
- d. It is further submitted that the **end-objective of ensuring healthy competition in the market is not relevant only in the case of Mergers and Acquisitions**. In this regard,
- i. The Authority has noted (Para 2.15) that ***“It is in the interest of the individual consumer that the market for provisioning of services remains competitive”*** and that ***“the World Bank and ITU note ‘competition is the most efficient and equitable mechanism available for organizing, operating, and disciplining economic markets’ and “Competition maximizes benefits to society by ensuring efficient resource allocation, increased productive efficiency, and investment in new technologies.”***
- ii. The Authority has also noted that as **per existing guidelines “Monopoly market situation is defined as market share of 67% or above of the subscriber base.”**
- iii. The Authority has further noted (Para 2.30) that ***“Market power is generally defined as the power to unilaterally set and maintain prices or other key terms and conditions of sales; that is without reference to the market or to the actions of competitors”*** and that Market power has also been defined as ***“A position of economic strength enjoyed by an undertaking which enables it to prevent effective competition being maintained in the relevant market by affording it the power to behave, to an appreciable extent, independently of its competitors, customers and ultimately consumers”***.
- iv. The Authority has also noted in its Consultation Paper (Para 2.32) that the Competition Act provides that there is **an abuse of dominant position when an enterprise**
- directly or indirectly, **imposes unfair or discriminatory condition** in purchase or sale of goods or services; or price in purchase or sale (including predatory price) of goods or service; or
  - limits or restricts production of goods or provision of services or market therefor; or technical or scientific development relating to goods or services to the prejudice of consumers; or
  - indulges in practice or practices resulting in denial of market access; or
  - makes conclusion of contracts subject to acceptance by other parties of supplementary obligations which, by their nature or according to commercial usage, have no connection with the subject of such contracts; or (e) uses its dominant position in one relevant market to enter into, or protect , other relevant market
- e. It is submitted that **as per the above definition, the incumbent PTT operator has monopoly market power in the fixed line segment and by virtue of its incumbency status also exercises dominance and control, in both fixed as well as mobile services especially over bottleneck facilities viz. charging and provision of interconnection facilities.**
- f. **While looking at and addressing the issue of dominance under M&A, the Authority must also recognize that this issue needs to be addressed even otherwise in the interests of healthy competition and level playing field so as to ensure the orderly**

**growth** of the sector and to **protect the interests of both the service providers and the consumers.**

- g. We thus believe that **in the present scenario, there is a very strong case for introducing asymmetric regulation**, where it is the **operators with greater market power and dominant position are subject to more stringent regulatory overview**. In fact, it is indeed **paradoxical that the incumbent operator is enjoying the benefits of an asymmetric policy and regulatory environment in its favour, which is completely at variance with international practices.**
- h. It is further submitted that in **addition to its dominant status, the incumbent operator also continues to enjoy a financial advantage viz. the benefits of ADC, license and spectrum fee waivers**, vis-à-vis the private operators, thus **tilting the playing field in its favour.**
- i. It is submitted that **one of the key objectives of NTP-99 was to “Transform in a time bound manner, the telecommunications sector to a greater competitive environment in both urban and rural areas providing equal opportunities and level playing field for all players”**
- j. It is submitted that **with the passage of over eight years since the introduction of NTP-99, it is a matter of concern that the incumbent operator continues to enjoy financial waivers and benefits to the detriment of the private sector.**
- k. It is submitted that **there is thus a clear case for a sunset date in respect of the above financial advantages. The Authority has already indicated that ADC will be phased out after this financial year. It is urged that this commitment must be adhered to.** Further we believe that it is **high time that the reimbursement of license fee and spectrum charges is stopped.**

**Q7. As a regulatory philosophy, should the DoT and TRAI focus more on ex post or ex ante competition regulation, or a mix of two? How can such a balance be created?**

- a. We believe that, **for the present, both DoT and TRAI should continue to adopt an ex ante approach to competition regulation** for mergers and acquisitions as the **industry is still not fully settled** and there are certain competition and consumer issues that can arise in such cases. It would thus be wise to take a prudent approach and continue with an ex ante approach to M&A for the present.
- b. This will also **give greater transparency and clarity to the regulatory environment.**
- c. An **ex ante approval allows a considered examination** of issues such as spectrum, market power etc, **before the event. A reversal of a decision in the ex post scenario would be difficult.**

### **SUBSTANTIAL EQUITY**

**Q8. Should the substantial equity clause (1.4 of UASL) continue to be part of the terms and conditions of the UAS/CMTS license in addition to the M&A guidelines? Justify.**

- a. **We have noted that Clause 1.4 was included in the UASL and CMTS Licenses at a time when the telecom sector was at a nascent stage. We have also noted the significant changes that have come about in the sector viz.,**

- i. **Market has become highly competitive** with 6-8 service providers in every service area
  - ii. **The four large operators have a market share ranging from 15-25%**
  - iii. **Introduction of specific guidelines for M&A**
  - iv. **Financing pattern and financing requirements** for the sector have **undergone a sea-change with** as much as **Rs. 50,000 crores per annum** investment being envisaged **over the next few years.**
  - v. **FDI Limits have been raised from 49% to 74%**
  - vi. That in a high capex sector like telecom it would be useful for firms to have the freedom to have entities buy equities and invest to support rollout plans and other improvements in the network
- b. We have further noted that substantial equity of upto 25% is permitted in some sectors in India.
  - c. However, we have also noted the Authorities views and observations that :
    - *“The scenario in India indicates that the Indian market has not sufficiently matured...”* (Para 2.49)
    - *“In the communication market, it is essential that healthy competition be maintained between service providers...”* (Para 3.8)
  - d. We too are of the view that the **access market has still not fully settled and matured.** Under these circumstances, we believe that the **substantial equity clause** which has safeguarded **the industry against the anti competitive play of market forces**, must **continue to be part of the terms and conditions of the UAS/CMTS license.** Retention of this clause would be useful to prevent anti-competitive behaviour and will allow for true diversity in the range of choices to the consumer.

**Q9. If yes, what should be the appropriate limit of substantial equity? Give detailed justification.**

- a. In view of our above submissions, we believe that for the present, **the definition of substantial equity should be retained at the existing level of 10%**
- b. It is further submitted that **equity holdings beyond the limit of 10%** should be **permissible**, but the same should be made **subject to the M&A guidelines on a proportionate basis.**
- c. It may in any event be noted that the **existing M&A guidelines** (Clause 12) provide that *“while granting permission for merger of licences, the Licensor may, suitably amend / relax/waive the conditions in the respective licences relating to the Clause on holding of ‘substantial equity’.* It is submitted that **this provision may be applied to equity holdings beyond 10%** and not just in the case of M&A alone.
- d. In addition to the above, it is submitted that the **Authority may exercise its suo moto powers to intervene in case it is apprehended** that the substantial equity clause is being misused to indulge in license squatting or to unfairly obstruct competition.

**Q10. If no, should such acquisition in the same service area be treated under the M&A Guidelines (in the form of appropriate terms and conditions of license)? Suggest the limit of such acquisition above which, M&A guidelines will be applied.**

- a. See answer to issue above.

**Q11. Whether a promoter company/legal person should be permitted to have stakes directly or indirectly in more than one access License Company in the same service area?**

- a. In this regard, it is first submitted that a **distinction may be drawn between a promoter who can use this equity to exercise operational or managerial control** over another company and a **financial non-strategic investor**.
- b. The **current License Condition** under Clause 14.4 (ii) states that “**A promoter company / legal person cannot have stakes in more than one Licensee Company for the same service area** for the Access Services namely; Basic, Cellular and Unified Access Service. ‘Substantial equity’ herein will mean ‘an equity of 10% or more’. A promoter company/ Legal person cannot have stakes in more than one LICENSEE Company for the same service area.”
- c. We believe that **this provision may continue to be retained** in the License for the time being, till the industry fully settles and matures.

**Q12. Whether the persons falling in the category of the promoter should be defined and if so who should be considered as promoter of the company and if not the reasons therefore?**

- a. Yes, for the reasons mentioned in answer 11 above, there is a **need to clearly define** the persons falling in the **category of promoter**. It is submitted that the **definition of “promoter” as given in Company Law should be adopted for this purpose including persons acting in concert.**

**Q13. Whether the legal person should be defined and if so the category of persons to be included therein and if not the reasons therefor.**

- a. Yes, the term legal person should also be defined. It is submitted that here too, the definition of “legal person” as given in Company Law should be adopted .

**Q14. Whether the Central government, State governments and public undertakings be taken out of the definition for the purpose of calculating the substantial shareholding?**

- a. **No**. There should be **no such waiver / exemption** for Central Government, State Government or PSUs for the purpose of calculating substantial shareholdings. Whatever are the **provisions of license** in this regard **should be applied equally to all stakeholders so as to ensure level playing field**.

#### **PERMITTING COMBINATION OF TECHNOLOGY UNDER SAME LICENSE**

**Q15. In view of the fact that in the present licensing regime, the initial spectrum allocation is based on the technology chosen by the licensee (CDMA or TDMA) and subsequently for both these technologies there is a separate growth path based on the subscriber numbers, please indicate whether a licensee using one technology should be assigned additional spectrum meant for the other technology under the same license?**

I. **Crossover Allotment of Spectrum Not Permissible Under Present Regime**

- a. **It is our firm view that crossover allotment of spectrum is not permissible under the present UAS license**, i.e. a Unified Access Licensee offering Mobile services under CDMA based systems cannot be allotted GSM spectrum also to offer Mobile Services, under the same UAS license and vice versa.
- b. This is **clearly established by a composite reading of various terms and conditions of license and other related documentation**

**Provisions of License**

- i. The **UAS License contemplates only one single network** to be set up by the Licensee for provision of Mobile Service. In case of **cross over of allotment** of spectrum, the same would **tantamount to the Licensee running and operating two independent networks** for provision of Mobile Service one GSM and another CDMA, which is **not permissible under the UAS license**.
- ii. As per the existing license regime, **the applicant company first acquires the license** upon payment of a specified entry fee and **then exercises its technology choice**. Clause 43.1 of the UAS License provides that

*“A **separate specific authorization** and licence (hereinafter called WPC licence) shall be required from the WPC wing of the Department of Telecommunications, Ministry of Communications **permitting utilization of appropriate frequencies / band** for the establishment and possession and operation of Wireless element of the Telecom Service under the Licence Agreement of Unified Access Service under specified terms and conditions including payment for said authorization & WPC licence. Such grant of authorization & WPC licence will be governed by normal rules, procedures and guidelines and will be subject to completion of necessary formalities therein.”*

Thus **when a license is acquired, the same is technology neutral** and the licensee has the **freedom to choose either the GSM or the CDMA platform** to offer his mobile services. **But the authorization that is granted by WPC is based on the technology choice that is exercised by the licensee for granting of “appropriate frequency band”**

- iii. This is also the position as per Clause 23.1 of the UAS License which states

*“The **Licensee shall provide the details of the technology proposed to be deployed** for operation of the service....”*

Thus it is **very clear that a technology choice has to be made** by the licensee so as to be able **to get the appropriate spectrum from WPC**.

- iv. Clause 23.5 of the UAS License provides that :

*“The frequencies shall be assigned by WPC from the designated bands prescribed in National Frequency Allocation Plan - 2002. (NFAP-2002) as amended from time to time. **Based on usage, justification and availability, spectrum may be considered for assignment, on case by case basis”***

Thus clearly the spectrum that is allotted /assigned has to be from the designated bands prescribed in NFAP-2002 (as amended from time to time). Further, the **use of the words “usage” and “justification” clearly specify a legacy baggage and a link to the initial technology choice that is exercised** by the licensee in Clause 23.5.

This is also the view of the Authority (Para 4.8) where it has noted that *“Thus, it is clear that **the option for various technologies** by the licensee has been **addressed within the four corners of National Frequency Allocation Plan**. It is for this reason that clause 23.5 of UASL mentions: “Based on usage, justification and availability, spectrum may be considered for assignment, on case by case basis.” Evidently, the **availability of spectrum in specified bands has been linked with usage and justification thus indicating a legacy baggage.**”*

v. Further, Clause 43.5 (i) of the UAS License provides

*“For wireless operations in SUBSCRIBER access network, the frequencies shall be assigned by WPC wing of the Department of Telecom from the frequency bands earmarked in the applicable National Frequency Allocation Plan and in coordination with various users. **Initially a cumulative maximum of upto 4.4 MHz + 4.4 MHz shall be allocated in the case of TDMA based systems @ 200 KHz per carrier or 30 KHz per carrier or a maximum of 2.5 MHz + 2.5 MHz shall be allocated in the case of CDMA based systems @ 1.25 MHz per carrier, on case by case basis subject to availability**”*

Thus the **license** very clearly provides for an initial allotment of spectrum based either on TDMA systems **or** based on CDMA systems and **does not contemplate a scenario where both types of spectrums can be given to a single Licensee** for provision of same service on different platforms.

vi. The fact **that the licensee can only get spectrum based upon his original technology choice, is further reinforced by Clause 43.5(ii)** that provides

*“**Additional spectrum beyond the above stipulation may also be considered for allocation after ensuring optimal and efficient utilization of the already allocated spectrum taking into account all types of traffic and guidelines / criteria prescribed from time to time ...**”*

Thus the **allotment of additional spectrum is linked to technology choice exercised vide Clause 43.5 (ii)** as it will consider additional allotment based on the optimal use of the existing allotments. It must be appreciated that additional allotments **can only be made pursuant to and in consonance with the initial allotments as per Clause 43.5(i)**.

Also, the license does not at any stage contemplate more than one technology choice being made by the Licensee. We thus disagree with the Authority’s view in Para 4.12 that the key issue is not a blanket disqualification for a licensee to offer more than one access service technology” We firmly hold that the **UAS License by clearly requiring the licensee technology choice at the outset** and then linking both initial as well additional spectrum allotments to the same, clearly rules out any scenario where a licensee can acquire spectrum for both technologies under a single license. This embargo on cross over allotments of spectrum is further endorsed by the fact that there are technology specific spectrum allotment guidelines as also spectrum usage charges.

## **Government's Spectrum Allotment Guidelines**

- vii. In addition to the above clauses of license, we submit that **this embargo on crossover allotment of spectrum, is further endorsed by the technology sensitive/specific spectrum allotment guidelines** prescribed by the Government.
- viii. The subscriber linked spectrum allotment guidelines prescribed by the Government **lays down two very separate and distinct paths for allotment of spectrum to GSM and CDMA operators** as it contemplates different tranches of spectrum allotment for GSM and CDMA operators. This is demonstrated through the table below which shows the subscriber linked spectrum allotment guidelines prescribed by the Government for GSM and CDMA in the **case of Delhi /Mumbai Metro Service areas.**

	<b>Subscriber Base</b>	<b>GSM</b>	<b>CDMA</b>
a.	Nil (Initial Allotment)	4.4 MHz	2.5 MHz
b.	3 lakh subscribers	6.2MHz	3.25 MHz
c.	6 lakh subscribers	8 MHz	-
d.	10 lakh subscribers	10 MHz	5 MHz
e.	16 lakh subscribers	12.4 MHz	6.25 MHz
f.	21 lakh subscribers	15 MHz	7.5 MHz

- g. It is clear from the above table as also the License terms and conditions, that **based on the technology choice exercised** by the operator, he would be **entitled to either 4.4MHz of GSM spectrum OR 2.5 MHz of CDMA spectrum.** Upon achieving a subscriber base of 3 lakhs, the GSM operator is entitled to receive an additional spectrum of 1.8MHz while the CDMA operator is entitled to receive an additional spectrum of 1.25MHz. Similarly, at a subscriber base of 10 lakhs, the GSM operator is entitled to 10MHz of GSM spectrum, whilst the CDMA operator is entitled to 5MHz of CDMA spectrum. The **guidelines neither envisage nor provide for additional spectrum to be allotted from another technology path.**
- h. Thus for provision of Mobile Service, the **operator has to choose the platform i.e. either GSM or CDMA so as to enable WPC to allot appropriate frequencies** in accordance with the spectrum allotment guidelines.
- c. The **Authority has also rightly noted that :**
- i. ***“The present UAS and CMTS licenses provide that the operator shall make its choice for specific mobile technology.”*** (para 1.16)
  - ii. ***“..spectrum is assigned based on technology-sensitive subscriber-base criteria, which is different for CDMA and GSM technologies...”*** (para 2.50)
  - iii. ***“As per the existing licensing regime, the applicant company is first given the license on a specified entry fee and then based on the technology option and the frequency band applied for by the licensee; the Wireless Planning & Coordination (WPC) Wing issues the WPC license which permits the utilization of appropriate frequency band.”*** (para 4.5)
- d. The **above view is also supported by the actions of the Government** with regard to the allotment of spectrum

- i. For example, in 1999-2000, when, pursuant to the announcement of technology neutrality, **some GSM operators applied for CDMA spectrum**, the said **request was turned down by the Government** on the grounds that the **operators were technology neutral only within their designated band** and further that the CDMA spectrum was earmarked for the fixed service providers.

The DoT Letter dated April 9, 2001 stated:

*“...The operators have been permitted to operate the Cellular Mobile Telephone Service in any technology, however, the **technology shall be digital and has to operate in the designated frequency band...**”*

The **above decision was taken by the Government after technology neutrality was implemented** and thus any reference to the licenses being technology neutral and thus allowing for crossover allotment of spectrum is incorrect and cannot be sustained in view of the clear position taken by the Government in 2001.

- ii. Furthermore, there has been **no change in this position even after the introduction of UAS licensing**. It may also be noted that while the UAS guidelines issued by the Government on 11.11.2003 **provided that “the unified access providers are free to use any technology without restriction”** it also stated that **the service providers migrating to UASL will continue to provide wireless services in the already allocated and contracted spectrum”** thus clearly indicating that while the UAS operator has the freedom to choose his path /platform, for the migrating operator that **technology choice has already been made** and that he has to continue to provide wireless services as per his contracted spectrum.

The Authority too has noted (Para 4.9) that *“The **guidelines reiterated that the service providers migrating to unified access service license will continue to provide wireless services in already allocated and contracted spectrum**. Thus it envisages continuity of technology in providing telecom services. Further, the guideline mentions, “the unified access service providers are free to use any technology without any restriction...Based on the above analysis, it can be said that **there is a legacy baggage on the licensees along with the pre-determined spectrum bands for the deployment of technologies**”.*

- iii. In the case of **Bharti Airtel**, when the company surrendered its UASLBSO License, it also **had to surrender its CDMA spectrum**. This was because there was a **clear understanding that it was not permissible to hold spectrums of both technologies** under its UASLCMTS license. It may be noted that this was done **despite the fact that the company actually had paid an entry fee and had both an operating network as well as subscribers on its CDMA platform**. It is also pertinent to note that **despite the surrender of license and also the surrender of spectrum, the entry fee was not refunded** to the company.
- e. Thus clearly the Government was of the view and has also implemented the practice that the technology choice had to be made by the Licensee at the very inception and that all allotments of spectrum pursuant thereto would be based on the technology / standard chosen by the Licensee at the inception itself.
- f. It may also be noted that **BSNL and MTNL that continue to hold both GSM as well as CDMA spectrum**, but this is on account of the fact that these operators have not migrated to a UAS regime and are continuing to provide fixed and mobile services under

separate licenses. The mobile services are being provided on the GSM platform and the fixed wireless services are being provided on the CDMA platform.

- g. Similarly, **there are also some private companies that are operating in both the GSM as well as CDMA space** but here too, it may be noted that the **services are being offered under separate licenses** and is **on account of a one-time waiver / exemption** given on the substantial equity clause at the time of UASL so as to **facilitate the settlement of the WLL(M) dispute through migration to UAS** Licensing regime.
- h. It is also submitted that the very fact that the **DoT has itself sought recommendations** of TRAI on, inter alia, **permission to service providers to offer access services using combination of technologies** (GSM/CDMA and / or any other) under the same License **shows that the same is not permissible under the present regime**. If crossover was permitted, then there was no need for the Government to seek the present recommendation on the said subject.

## **II. Consideration of Crossover Allotment Will Create Several Problems & Have Many Adverse Implications**

- a. Having established that **crossover allotment of spectrum is not permissible** under the present policy & licensing regime, we believe that **it is neither necessary nor desirable to review this policy**.
- b. At the outset, it is submitted that we are not aware of any new developments /emerging technologies in the access segment in recent years that warrant a relook at the embargo on crossover allotment of spectrum.
- c. the **performance of the mobile** industry over the last several years has been **commendable, as it has delivered**
  - i. **World class infrastructure** – at a **combined investments of over Rs. 85,000 crores**.
  - ii. **Coverage-** the industry has collectively covered over 8000 census and non-census cities and towns and is providing coverage / service in lakhs of villages.
  - iii. **Service** to over 174 million mobile subscriber, adding 5-7 million subscribers every month.
  - iv. Giving the customers the **benefits of competition choice and affordability** – with 6-8 mobile operators in ever service area and offering tariffs that are the lowest in the world
- d. **If crossover allotment of spectrum is considered**, in view of the **severe paucity of spectrum**, it will be **impossible to honour and adhere to the current spectrum allotment guidelines** as it will lead to a doubling of contenders for the already very scarce and limited resource of spectrum.
- e. Any **change of policy will also create uncertainty in the minds of investors** (Indian/Foreign) and will be a setback to their investment plans thus impacting the future growth plans of the industry.
- f. It is in fact the **mobile sector that has been the flagship of the Indian liberalization process** and it is the performance of this sector that has made India one of the fastest growing economies of the world and has placed India very firmly on the global telecom map.

- g. It may be noted that in the unique Indian environment where adequate spectrum was not available upfront, it was **the Government's subscriber linked spectrum allotment criteria** that gave the industry a **predicable policy environment in which to plan and grow their networks**. Operators are assured of additional tranches of spectrum upon achieving pre defined subscriber linkages
- h. In this regard, it may also be noted that as per the **present terms of UAS License, no Mobile Service Operator is permitted to hold equity of more than 10%** in another Mobile Service Provider in the same service area. In other words, the Government's policy is that **there should be healthy competition** and each Mobile Operator, whether it is GSM versus GSM or GSM versus CDMA or CDMA versus CDMA, must compete openly and fairly in the market and must not be in a position to exercise operational or managerial control over another operator / network.
- i. It may be noted that **in case of a crossover allotment** of spectrum, the **licensee would in fact be running two separate networks** and providing mobile service on both CDMA and GSM platforms, which would be **against the basic tenets of the present policy** of the Government as enunciated in the license. It may also be noted that there was **only a one-time waiver given to this policy** in November 2003 so as **to facilitate the migration to the UASL** regime.
- j. This **situation would become even more anomalous** if one was to consider the case of the licensees who migrated from BSO to UASL who were given one time waiver on the 10% equity cross holding clause that was given at the time of UAS licenses to facilitate the migration to UASL. Such **licensees are already running separate GSM and CDMA networks** under two different licenses in the same service area. **If crossover allotment of spectrum were to be permitted**, then the Licensee **could apply for and receive both GSM as well as CDMA spectrum under each license** and would thus be **able to run four networks in the same service area** which would not only be **detrimental to Government's policy of fair competition, but against all principles of level playing field**.
- k. **If it was considered that the companies could merge** and be allowed to keep the spectrums of both technologies, then **would CDMA spectrum be returned to say Bharti** who surrendered their CDMA spectrum. It may be noted that the **entry fee paid by the company was not refunded and thus in fact, Bharti have paid for the spectrum, which has been taken back by the Government**
- l. What about the **GSM operators who had earlier applied for CDMA** spectrum and their applications had been rejected because they were told that technology neutrality applied only within their designated band. The principle of technology neutrality was in place in 1999 when their applications were rejected, all the UAS licensing regime did was to allow the provision of both fixed and mobile services under a single license. There was no change in the technology neutrality policy under UASL – rather if at all there was a reconfirmation that the technology choice had already been made by the licensee and that he could migrate to UASL only with his allocated / contracted spectrum.
- m. Further, **how will the spectrum be allotted for an alternate technology?** At present the initial allotment is based on the technology choice exercised by the licensee and then additional spectrum is **as per the technology specific criteria** laid down by the Government. For example, a CDMA operator with a subscriber base of 10 lakhs is entitled to a fourth carrier (1.25 MHz) in CDMA spectrum. How will his eligibility for GSM spectrum be determined and what will be the subscriber base that will be considered for that allotment. Further, **what would be the quantum of spectrum** that would be allotted to him? Would it be 2 MHz of GSM spectrum, instead of 1.25 MHz of CDMA spectrum?

- n. Associated with this issue would also be the **issue of payment of spectrum usage charges**. In the above example, would the operator pay spectrum usage charges at 4% of AGR (the rate applicable to GSM spectrum)? Would this rate be applied to his full AGR or will the subscriber numbers be considered separately for GSM and CDMA. The tranches of spectrum allotment, the spectrum usage charges are different for GSM and CDMA. **How will the differential allotments of spectrum and the differential spectrum usage charges be administered and enforced?**
- o. How will an operator seeking a **crossover allotment** of say GSM spectrum **be placed in the hierarchy of spectrum allotment as by all accounts he will be a new operator** in that technology. How will the policy be able to **ensure that the spectrum requirements of existing GSM licensees who have already made their technology choice are met** as per the roadmap that has been laid down by the Government?
- p. Given that the Authority has recorded that there is **even as of now a spectrum shortage of 20 MHz even for the existing operators**, can the Authority consider **recommending a policy that will further aggravate the problem?** Given the severe paucity of spectrum for existing operators, **would any such policy amendment be tenable that creates more contenders for a limited resource**
- q. The Authority has repeatedly maintained that **spectrum is bundled along with the license**. The **initial entry fee paid by the operator includes the payment for spectrum**. When the fixed operators migrated to UASL they had to match the entry fee paid by the 4<sup>th</sup> CMSP for the right to offer cellular mobile services in the allocated / contracted spectrum. This **entry fee is only for receiving spectrum as per the technology choice** exercised by the licensee and **not for receiving spectrum for both technologies**.
- r. This is evident from the case of the **BSOs who at the time of migration to UASL** were allowed a one-time waiver and **allowed to operate two different licenses** in the same service area. However, it may be noted that **for each of these licenses, a separate entry fee was paid** and services of both technologies were being offered under different licenses.
- s. If such a situation were to be permitted, it would amount to **allowing two licenses to operate for the price of one** and in effect allowing a **new operator into the field through the backdoor**, without payment of entry fee, without consideration of 'need & timing', etc..
- t. It is also submitted that were such a situation to be considered, then it would then have to be applied equally across all operators / licensees. Thus it would **not be just a case of one company and a one-time allotment**. If this is permitted then **all existing licensees** which are at least 6-8 in every service area **can stand up and demand allotment of spectrum for an alternate technology**. In an **environment of spectrum scarcity and already very intensive competition**, **how will the market be managed?**
- u. **What about the rollout obligations** that are part of the license. The Authority has itself noted (in Para 4.14) that the initial spectrum of 4.4MHz /2.5MHz for GSM and CDMA respectively is for the purpose of initial coverage and meeting the rollout obligations. If a **cross over allotment of spectrum is given to an existing licensee** he would have no such obligations and he **would be able to get the scarce spectrum resource** at a negligible fee of 2% of AGR **without any obligation to use it**. This would lead to concerns about **spectrum hoarding, difficulties in ensure efficient utilization of this resource, etc.**

- v. The Authority too, has correctly noted (Para 4.12), the **various practical problems associated with any consideration for a crossover spectrum allotment** viz. *“in such a case of plurality in technological choice, the issues of quantum, criterion of allocation and inter se allocation prioritization amongst licensees become key issues for determination. Linked with this is also the issue of spectrum charges which is based on certain slab system and are technology centric.”*
- w. In light of the above, it is strongly submitted that **under the present policy and license regime, a licensee using one technology cannot be assigned additional spectrum meant for the other technology** under the same license and for the various reasons outlined above, it is **neither necessary nor desirable to review the present policy**. In any case, even for the sake of repetitions, neither there is enough spectrum nor a road map of the availability of spectrum even for existing GSM players as well those in the queue. Therefore, the Authority must not think of any change to the existing policy to allow cross technology operations.

**Q16. In case the licensee is permitted, then how and at what price, the licensee can be allotted additional spectrum suitable for the chosen alternate technology;**

- a. In view of the fact that cross over allotment of spectrum is not permissible, the question of a setting a price for the same does not arise.

**Q17. What should be the priority in allocation of spectrum among the three categories of licensees given in ¶4.16 of the chapter?**

- a. It is first submitted that In respect of priority in allocation of spectrum, the **classification given by the Authority in Para 4.16 of its Consultation Paper needs to be revised** as it **distinguishes between licensees awaiting additional allotment and those awaiting initial allotment**.
- b. It is submitted that as per the existing license regime, the applicant company first acquires the license upon payment of a specified entry fee and then exercises its technology choice. Clause 43.1 of the UAS License provides that
 

**“A separate specific authorization and licence....shall be required from the WPC ....permitting utilization of appropriate frequencies / band**
- c. Thus **spectrum can be allotted only after a license has been acquired** and the authorization has been received from WPC permitting utilization of appropriate frequencies.
- d. Thus **all licensees, irrespective of the time that they entered the field have equal rights to receive the spectrum** of their chosen technology path, **as per the subscriber linked spectrum allocation guidelines** laid down by the Government.
- e. **Once a license had been granted, all licensees are equally eligible to receive spectrum** as per the technology choice exercised by them and that the appropriate spectrum should be allotted by the Government strictly **on a first-come first serve basis, based on the date of application for spectrum..**
- f. Accordingly, **we do not agree with the distinction drawn by TRAI in 4.16 between licensees awaiting additional allotment and licensees awaiting initial allotment. As**

clarified above, **all the companies who have signed the license agreement** fall within **same category of “licensees”** and are **equally eligible to receive spectrum**.

- g. We believe that the **Licensee Applicants who already have a license for another circle /service area should be next in priority for acquiring a license** in a new service area and consequently being eligible for spectrum. In this regard it is pointed out that **applicants who had bid for and lost out at the time of the 4<sup>th</sup> Cellular License have been disadvantaged vis-à-vis the CDMA operators who were allowed to migrate to UASL regime without any reference to need and timing**. Thus **these licensee applicants had an a priori right vis-à-vis other applicants to get a license in a fresh service area**.
- h. It is further submitted that **special consideration may be extended to such operators who are closer to achieving a pan-India presence**. It is universally accepted that **telecom is a highly capital intensive industry and greatly benefits from economies of scale**. Because **licensing in India was introduced on a service area wise service specific basis**, this has led to a fragmented market which does not allow the operators to fully leverage the economies of scale to deliver maximum benefits to consumers. Thus, **the trend over the years has been towards consolidation and convergence in the industry**. Although the **legacies cannot be wished away**, efforts could be made to **address the same within the existing system**. Most of the telecom service providers have achieved or are near achieving a pan India presence. There is also a move by the operators to acquire NLD/ILD licenses. If the **efforts of the operators to achieve pan India and convergent operations are facilitated**, it will **ensure the desired result of both consolidation and convergence, as repeatedly enunciated by the Authority and allow the industry to grow in a vibrant and healthy manner**.
- i. In this context, it may be pertinent to note that the **Government rules for allocation of a pan India unique mobile level** requires the operator to have a **presence in minimum 10 circles / service areas**. It is suggested that a **similar approach could also be adopted in the above respect**.
- j. As regards, **existing licensees wanting spectrum to deploy an alternate technology**, it is reiterated that the **same is not permissible under the present policy and licensing regime** and, for the **reasons given in pre-paras, it is neither necessary nor desirable to review this policy**.

**Q18. Whether there should be any additional roll out obligations specifically linked to the alternate technology, which the service provider has also decided to use?**

- a. It is submitted that **as cross over allotment of spectrum is not permissible and we strongly believe that this policy should not be reviewed**, the question of **prescribing ‘additional rollout obligations’ does not arise**.

**Q19. Lastly, as such service provider would be using two different technologies for providing the mobile service, therefore what should be the methodology for allocation of future spectrum to him?**

- a. It is again reiterated that **cross over allotment of spectrum is not permissible** under the present policy and licensing regime and, for the reasons given in pre-paras, it is **neither necessary nor desirable to review this policy**.

## **ROLL OUT OBLIGATIONS**

**Q20. Should present roll out obligations be continued in the present form and scale for the Access service providers or should roll out obligations be removed completely and market forces be allowed to decide the extent of coverage? If yes, then in case it is not met, existing provision of license specifies LD charges upto certain period and then cancellation of license. Should it continue or after a period of LD is over, enhancement of LD charges till roll out obligation is met. Please specify, in case you may have any other suggestion.**

- a. We have consistently maintained that the **very raison d'être of rollout obligations needs to be reviewed. Past performance** has clearly demonstrated that the **stipulation of rollout obligations and even the imposition of stiff penalties** for non-performance, **does not necessarily lead to achievement of rollout.**
- b. In fact, it was for this reason that the rural **rollout obligations stipulated for FSPs under their licenses were waived in the UAS regime.**
- c. Further, the **Authority in its recommendations on Unified Licensing** regime had questioned the relevance of rollout obligations and had **recommended waiver of rollout obligations (for NLD operators)** after noting that:
  - i. "... despite incorporating rollout conditions in the license, one has not seen the large operators entering and covering telecom-facilities-wise backward areas. A need has been felt to attract investments in such areas by making the operations more viable." (Para 3.2)
  - ii. "The objectives of rollout obligations are to ensure spread of infrastructure (as far as possible) and coverage of rural, remote and less developed areas. Specifying these obligations in the license conditions in the past could not meet these objectives in a major way." (Para 7.1)
  - iii. "As mentioned earlier, if the service provider does not find any part of the service area financially viable then the service provider will not rollout his network in that area. The service provider may even prefer to pay the penalty for not meeting such specified rollout obligations. Our thrust has to be on ensuring that service providers find it attractive to roll out his network even in uneconomic areas. The license conditions should be such that service providers find it attractive to rollout the network even in such areas.....Thus in general, rollout obligations should be phased out expeditiously." (Para 7.2)
- d. It is also submitted that **once the Government has moved to a market led policy** and licensing regime and has **facilitated the introduction of competition**, the **objective of coverage and reach is being automatically achieved** as players will continue to venture into newer areas to seek business.
- e. In this context it may be noted that :
  - i. The Indian mobile industry which is the most aggressive and intensely competitive segment within telecom has invested over Rs. 85,000 crores in the sector
  - ii. It has a total mobile subscriber base of over 174 million which is growing at 6-7 million subscribers per month.
  - iii. It has reached out and covered 60% of the population and 40% of the geographic land mass.

- iv. Cellular coverage and service is available in over 8000 census and non census cities and towns and lakhs of villages.
  - v. The sector is already offering the lowest tariffs in the world
- f. The **aggressive growth of the mobile sector has been driven by the intense competition** in the sector and **not as a result of any stipulated rollout under license**.
- g. Under these circumstances, we believe that the **mobile industry has in fact, the least requirement of any mandatory rollout obligation**. It is therefore surprising that **while rollout obligations have been removed for other segments like Fixed Service Providers, national and international long distance operators**, etc; these not only **continue to be prescribed for mobile /access service providers**.
- h. The Authority too, has recorded this viewpoint (Para 5.17) that ***“once effective competition is operating in the market then rollout obligations are not required. This is because competition will force the service providers to extend their coverage and provide good quality of service.”***
- i. As regards the **counter viewpoint that rollout obligations are required** to ensure quicker rollout especially in the **non lucrative areas** and since **USOF is providing support in specific locations / clusters only** (Para 5.18), it is submitted that the **more appropriate approach to expand the size and scope of the USO funding** is to cover more locations. It is a well known fact that there is a significant corpus available in the USO Fund, and the size of the fund is increasing on a continuing basis. The Government is already considering a second phase for its USO Subsidy support scheme. The industry is also deliberating on proposals to give an impetus to rural telephony.
- j. We thus believe that it is **not necessary to stipulate rollout obligation** in the licenses. Accordingly, it would **also be desirable to amend the existing provisions of license to do away with the stipulation of LD charges**.
- k. Needless to say, the **above provisions should be equally applicable to both new as well as existing operators**.
- l. In the context of existing operators it is submitted that the service providers have faced many constraints and challenges in complying with the licensing conditions pertaining to rollout. These include inter alia:
- **Delays in SACFA Clearances** – This aspect has also been noted by the Authority (Para 5.16) where it has recorded that ***“there have been delays in the past in the allocation of spectrum as it is subject to availability”*** and that ***“in the absence of spectrum, it will not be possible for him [service provider] to start rollout”*** and that ***“the rollout obligation would not be fulfilled if the date is reckoned from the effective date of license...”***
  - **TEC Testing Delays** – The date of the TEC test certificate issued by the TEC is taken as the date for commissioning. There **have admittedly been delays of even upto one year on this account** and **thus even if the service providers have commissioned their network, the same is not taken into account** till a TEC test certificate has been obtained. The Authority too, has noted that most of the service providers are in default of the required TEC certificate, which it is submitted would not necessarily mean that the network had not been commissioned.

- m. It may be noted that the **Government is cognizant of the concerns and challenges** and it was to address the same that **an automatic procedure for SACFA clearances was introduced in June 2006** and a **self test certificate was allowed to be submitted by service providers from January 2007** for completion of rollout obligations.
- n. There are however still some concerns on the implementation of the above measures. While the **Authority has observed that the date of self certification is being taken as the effective date for rollout**, it is submitted that **this is not the case in practice** as these **self test reports are not being accepted by TEC** on the ground inter alia that they need to physically verify the site before accepting the report, thus negating the very concept of self certification.
- o. In light of the above, we believe that **for existing service providers, there should be no Liquidated Damages** imposed on service providers **on account of delays** in SACFA clearances / TEC testing **that are beyond the control of service providers**.
- p. It is again reiterated that the **stipulation of mandatory roll-out obligations for access services should be removed**, as done earlier for other licenses and that that the removal of this condition of roll out obligations should be **applicable both for existing as well as for new operators, as was earlier done in the case of National and International Long Distance Services**.

**Q21. Is there a case for doing away with the performance bank guarantees as the telecom licensees are covered through the penalty provisions, which could be invoked in case of non-compliance of roll out obligations?**

- a. As already submitted earlier, **the aggressive growth in the mobile sector is being driven by the market** and the **intense competition in the sector**. In today's scenario, **Bank Guarantees** from service providers have **lost their relevance** as **operators are vying with each other to reach out to newer markets**.
- b. It is also submitted that **Bank Guarantees benefit neither the end-customer nor the industry nor the Government**. These **only benefit the banks**. In fact, Bank Guarantees **represent a huge cost in the operations** which is **ultimately reflected in the end user tariff**.
- c. The estimated figures of Bank Guarantee for entire telecom industry are as follows:-

S.No.	Bank Guarantee	Amount (in Crores)	Bank Charges @ 1% (Crores) annually
1	Performance Bank Guarantee	1,350	13.50
2	Financial Bank Guarantee	2,500	25.00
3	Financial Bank Guarantee - Spectrum Charges	500	5.00
<b>Total</b>		4,350	<b>43.50</b>

Note – Taking 5 major telecom players into consideration

- d. From the above it is clear that **BGs impose a significant financial burden** on the Operators, which **acts as a barrier against spread of affordable service**. The amount paid towards bank charges for Bank Guarantees could be used by the service providers for further roll out of service.

- e. As an illustration, it may be very pertinent to mention that keeping in mind that a Ground Based Tower on an average costs about Rs 35 lakhs, **the amount paid annually towards bank charges could instead be used for setting up 120 to 130 towers – especially in rural areas where the service is yet to reach.**
- f. It is also submitted that **over the past few years, Government has reduced the various Bank Guarantees** like Financial Bank Guarantee and the NLD Performance Bank Guarantee, etc. We believe that this progressive action is **a recognition of the fact that Bank Guarantees impact the cash flows** of companies in this highly competitive market **and add a significant cost burden** on the operators who are important players in the Indian telecom sector and are partnering the public sector telecom players for the aggressive growth of the telecom service in the country at affordable tariffs.
- g. **In a situation where operators are now aiming to reach out into new untapped markets** in rural areas, the **cost of service** will surely be a **key consideration** for potential consumers. We believe that **all efforts should be made to rationalize the cost structure** so that consumers are able to avail of the most affordable tariffs and the industry is able to achieve the telecom targets of the Government.
- h. It is very important to note that **removal of BGs will not only reduce the cost structure** of the companies but will **also enhance the ability of the companies to raise funds for expansion.**

**Q22. Should roll out obligations be again imposed on the existing NLD licensees? If yes, then what should be the roll out obligations and the penalty provisions in case of failure to meet the same.**

- a. **No, we believe that rollout obligations should not be imposed again on NLD operators.**
- b. In this context, the Authority has itself noted (Para 5.5) that **with the reduction in the entry fee and removal of rollout obligations** for NLDOs, the **number of NLDOs has gone up from 5 to 17 since November 2005.**
- c. It may be noted that this **waiver was extended equally to both new as well as existing NLDOs** and there is **no cause or justification to review this position**, which was **arrived at** by the Authority **after extensive consultations and was also accepted by the Government.**
- d. In the context of the **Authority's concern** that the **benefits of competition in NLD have not percolated down to the rural and far flung areas**, it is first submitted that **all mobile subscribers** (200 million out of 250 million) **in both urban as well as rural areas, are getting the benefits of affordable long distance tariffs.**
- e. The **problem arises in the case of the fixed line subscribers** in rural and remote areas who are **availing of the services of the incumbent PTT operator.** Such consumers have **not been able to avail of the benefits of competition, choice and affordability** of long distance tariffs on account of the fact that **despite private NLD licenses being amended in 2005 to carry intra circle NLD calls, the same could not be implemented** as the incumbent PTT operator did not allow the private NLDO to terminate calls on its network.

- f. Thus **access providers** in the case of an intra circle mobile to fixed call terminating on the incumbents fixed line network, were constrained to hand over the call at the Level 2 TAX and pay the requisite charges and were **not able to hand over the call to a private NLDO at a more competitive rate.**
- g. The **problem has been further aggravated by a clarification** to the above amendment, which negated the very objective of the amendment as it stated that "...It is hereby clarified that the handover, takeover, termination etc. of the intra-circle traffic shall continue to be governed by the terms and conditions of the licence agreement of the originating service provider irrespective of whether the traffic is carried by the originating service provider itself or through NLDOs..".
- h. As per the above clarifications, NLDOs would have to follow the originating service provider's routing plan, not the routing plan of their license whilst carrying intra-circle traffic.
- i. It is submitted that besides the above clarification being anomalous vis-à-vis the NLD license, it has also **negated and nullified the benefits of competition and choice** envisaged in the amendment of December 14, 2005, which had been heartily welcomed by the industry.
- j. It is submitted that **non-implementation of the amendment of December 14, 2005** as also the **ambiguity created by the recent "clarification"** have **constrained both the private NLDOs as also the access providers from offer the full benefits of competition, choice and affordability**, especially to the **consumers in the rural and far flung areas who invariably would have a fixed line connection only from the incumbent PTT operator.**
- k. **Support of the Authority is requested** to redress the above situation.
- l. In light of the above, it is **reiterated that it is not desirable to re-impose rollout obligations** on the NLD sector and **further that rollout obligations in general, should be done away with for all segments** and the **objective of coverage should be achieved through a market led approach** coupled with a **package of policy and regulatory measures designed to 'incentivise' rollout.**

**Q23. What additional roll out obligations be levied on ILD operators?**

- a. For the reasons outlines in pre-paras, there is **no requirement for any additional roll out obligations to be levied on ILD operators.** A market led approach is preferable to mandating rollout

**Q24. What should be the method of verification of compliance to rollout obligations?**

- a. It is again submitted that **rollout obligations should not be mandated** and thus the **question of 'verifying compliance' does not arise.**

**Q25. What indicators should be used to ensure quality of service?**

- a. The Authority has noted that the **technical parameters** which are used to **determine the quality of the network** in a particular geographical area are **Call Success Rate, Call Drop-out Rate and Voice Quality.** It is submitted that the parameters prescribed by the Authority for QOS **should continue to be used to determine the QOS.**

- b. It must however be appreciated that **achievement of the above QOS parameters depends upon a number of factors**, viz. **timely availability of adequate spectrum** and **adequate and timely augmentation of interconnection facilities** and **unless the service provider is assured of the basic wherewithal to ensure QOS**, he will be **unable to achieve the benchmarks** set by the Authority.

#### **Issues Related to Availability of Spectrum**

- c. In this regard the Authority has itself noted in Para 6.42 that the spectrum requirement of existing operators is 20MHz more than the existing available spectrum.

#### **Issues Related to Interconnection**

- d. Further also the issues related to interconnection have still not been addressed, including inter alia:
- Private operators continue to be interconnection seekers despite 12 years of service, when in fact, at least in the case of cellular services, they should have been accorded the status of Interconnection Providers
  - The full costs for setting up of interconnection are borne by the private operators even though the port is used for by both interconnecting parties for incoming as well as outgoing traffic.
  - There is an elaborate and long drawn out process followed by the incumbent operator for granting interconnection or augmenting existing interconnection facilities
  - The delays on the part of the incumbent impact the QOS of the industry and also its ability to add on more subscribers
  - Etc
- e. The **Authority is aware of these concerns and challenges** being faced by and has referred to the same in its various study papers.
- f. It is submitted that these **challenges and constraints being faced by the industry on the issue of interconnection**, which is the very life blood of any telecom network, **arise on account of interpretative controversies on the jurisdiction of the Authority** vis-à-vis the license and interconnect agreements entered into by the private service providers. As a result **all the efforts of the Authority to ensure equity and level playing field in the area of interconnection, have come to naught as virtually each and every Regulation, direction, order, guideline of the Authority on interconnection has been challenged** by the incumbent PTT and the matters are still pending adjudication in various Courts.
- g. **Some cases where the incumbent operator has challenged the jurisdiction** of TRAI are as below:

#### **TDSAT**

- i. **BSNL Appeal on 20 paisa** (Appeal No. 1 of 2006 and Appeal No. 8 of 2006) – In this appeal BSNL has challenged TRAI's IUC Regulation of 29.10.2003 to the extent that the Authority has prescribed an application of intra circle carriage charge of only 20p/minute for calls handed over by CMSPs at Level II TAX. BSNL challenged the Regulation in 2006 after
- ii. **Revenue Share on Roaming** (Appeal No. 14 of 2006) - - BSNL has challenged the TRAI decision of 11.9.2006 which reconfirmed there is no justification for a revenue

share on roaming calls and that the terminating network is entitled to only the termination charge as prescribed by Regulation.

- iii. BSNL Appeal on **ADC & FTC** (Appeal No. 14 of 2006 and Appeal No. --- of 2007) – BSNL has challenged the IUC (ADC) Regulations of TRAI (issued in 2006 as well as 2007)) for bringing down the ADC to 1.5% of AGR and then 0.75% of AGR as also the imposition of fixed termination charge at the same level as the mobile termination charges.
- iv. **Port Charges** – BSNL has challenged the Regulation of the Authority that has reduced the port charges payable by the private operators.
- v. **90 days Interconnection** – BSNL has challenged the Regulation of the Authority requiring them to provide interconnection within 90 days.

#### Supreme Court

- vi. In addition to the above, the Authority's appeal against the 2005 decisions of TDSAT in the matters of direct connectivity and also the RIO matter continue to remain pending in the Supreme Court.
- h. The **industry appreciates the efforts being made by the DoT and the Authority** to provide fair and equitable interconnection terms, but it also apprehends that **unless there is a clear policy intervention /clarification on the jurisdiction and powers of the Authority**, the above situation and **challenges will continue** to subsist and constrain the industry from moving ahead in a healthy manner.
- i. We believe that this **clarity can be provided through an amendment in the license agreements** of operators.
- j. In this regard, please find attached as Annexure-2 our **submissions to the Government seeking an amendment/clarification of the license terms with respect to interconnection.**
- k. We believe that as the **Consultation Paper deals with review of license terms**, the **Authority may suo moto make its proposals** to the Government **on this important issue.**
- l. It is submitted that **unless these issues are resolved** and **private operators are assured of adequate, fair and timely interconnection**, they will **always face constraints in complying with QOS** benchmarks laid down by the Authority.

#### Issues Related to In-building Coverage

- m. Another issue in this regard is with respect to the **requirement of in-building coverage.**
  - i. At the outset, it is submitted that **as per the provision of license**, the **90% coverage** prescribed **applies to both street as well as in-building** coverage and **does not apply to in building coverage alone.** This is clear from Clause 34.2 (iii) of the UAS License that provides that

“coverage of a DHQ/town would mean that at least 90% of the area bounded by the Municipal limits should get the **required** street as well as in-building coverage.”

- ii. It may further be noted that the term “**required**” coverage was not defined till 2005, when the Authority in its QOS Regulation prescribed as below:

Sl. No.	Parameters	Benchmarks	Averaged over a period
A	Network Performance		
(vii)	Service Coverage	In door >=-75dBm In-vehicle >=-85dBm Out door-in city >=-95dBm	

- iii. It is submitted that the **parameters prescribed by the Authority are too stringent** and it is **virtually impossible for the service providers to comply with such a rigorous requirement**. It is also submitted that **such an unrealistic requirement** which is practically impossible to achieve also leads to an **incorrect impression that there is inadequate coverage**, whereas in reality the operators have achieved both the DHQ rollout as well as 90% street coverage.

- iv. It may also be noted that **internationally wireless operators are not mandated to provide indoor building coverage**. A study of international practices of 26 countries from Asia Pacific, Africa, Middle East and Europe in this regard shows that :
- There is no stipulation on indoor cellular coverage and the same is also not part of the rollout / coverage requirement
  - The geographical coverage applies to street coverage only
  - In building coverage is left to market forces

A copy of the international practices on cellular rollout obligations and coverage criteria is attached as Annexure-3

- v. It is therefore submitted that the **Authority may kindly review the above parameter on indoor coverage** and
- there should be no prescription in the license for in-building coverage and
  - signal level of -95 dbm at street level should be the required criteria.
- n. In light of the above, it is submitted that the **in building coverage should not be used as an indicator to determine quality of service**. Further, **operators must be assured adequate and timely availability of both spectrum as well as Points of Interconnection** so that they are able to meet the QOS requirements laid down by the Authority.

**Q26. As the licensees are contributing 5 per cent of AGR towards the USOF, is it advisable to fix a minimum rural rollout obligation ? If yes, what should be that. If no, whether the Universality objectives may be met through only USOF or any other suggestions.**

- a. We are of the view that **as the licensees are contributing to the USOF**, it is neither **necessary nor desirable to provide for any “minimum rural rollout obligations.”** It is submitted that the **USO Fund levy is an equitable and transparent way to subsidize rural rollout** as the subsidy is directed / targeted at service providers who are interested in and are undertaking the responsibility of rural rollout. Further, as has already been submitted in pre-paras **rural rollout should be incentivised and not mandated**.
- b. Attention of the Authority is drawn to the **success of the Government’s USO subsidy support scheme that has drawn an excellent response from all stakeholders**. There

is now a **need for an expeditious implementation of this scheme** to ensure a **fast and cost effective rollout** in the rural areas.

- c. **Authority may also consider recommending a second phase** for this scheme where the **length and breadth of the project may be enhanced both in size and scope to cover areas other than those identified** by the USOF in Phase 1.
- d. The **industry is also** in the process of **deliberating on various proposals for rural telephony** including **ways of utilizing the USO Fund in the most effective manner for spread out of telecom services** in the country and to **give an impetus to rural telephony** and rural Broadband and will **revert to the Authority with clear proposals** in this regard.

**Q27. In case of rural roll out obligation, whether number of BTS in a certain area a viable criterion for verification of rollout obligation?**

- a. Not for 'verifying' rural rollout, but the number of BTS's could be used as way of estimating coverage achieved by service providers.

**Q28. What should be the incentives and the penalties w.r.t. rural roll out obligations?**

- a. We believe that a **comprehensive package of policy, regulatory and financial incentives** would go a **long way in achieving rural rollout at an aggressive pace to meet the country's telecom objectives**. Some such **measures which may be considered** by the Authority are as follows:
  - i. **Discount in License fee and Spectrum Charge** - We fully agree with the observations made by the Authority (Para 5.36), that a discount in the payment of license fee and spectrum charge could be considered so as to give incentive to rural roll-out.

As has been rightly observed by the Authority, one method of offering such type of discounts could be to provide **discounts based on specified number of BTSs installed by the operator in the rural areas** of its Service Area. A minimum rollout in the rural areas, in terms of BTSs to be installed, could be specified against which a discount could be given. The discounts could be on a slab basis, say 1% discount in license fee, in case 150 towers are installed in rural areas, 2% discount in license fee in case 300 towers are installed in rural areas and so on. **After mutual discussions with the service providers, the aspect of infrastructure sharing could also be factored in this mechanism.**

- ii. **Higher Mobile Termination Charge (MTC)** - COAI has time and again submitted the need for having **higher mobile termination charge with a view to incentivise roll-out, especially to the rural areas.**

Rural areas, being very price sensitive, the proportion of incoming calls is much higher than outgoing calls. Also since tariffs, and usage of service, in terms of Minutes of Use (MOU) is lower in Rural areas, it is but natural that revenues from termination charge will be a critical aspect which shall influence the decision of the service provider to go rural.

Comparable Asian economies of **Malaysia and Pakistan** which **have used cost based MTC as a tool for encouraging spread of service and have been successful in achieving much higher penetration.**

Therefore a **higher MTC will help in faster spread of service** and will **provide a greater incentive for a service provider to go rural.**

- iii. **Fixed Incentive** - With a **view to encourage infrastructure sharing as a means of ensuring faster roll-out in urban as well as rural areas**, a fixed amount per tower could be considered as an incentive which could be given to service providers who opt for sharing of infrastructure. The fixed one time incentive could be adjusted against the license fee payment which are due every quarter.

This will act as an incentive for service providers to offer passive infrastructure for sharing. This fixed amount should be provided even when a tower / Cell Site is shared between two operators. The fixed incentive system can be worked out through mutual consultations with all telecom operators as well as IP-I Service Providers.

- iv. **Exclusion from AGR of income from sharing of infrastructure** - Income earned from sharing of infrastructure should not be included in AGR. At present, the income earned by the Cellular Mobile Service providers (CMSPs) from sharing of infrastructure is included in the Adjusted Gross Revenue (AGR) and hence licence fee is levied on the same.

Even under the present scheme, **IP-1 Service providers set up and offer passive infrastructure for sharing and no license fee is paid** there on by these companies. This acts as an incentive and enables faster growth of telecom infrastructure in the country.

In order to give a boost to infrastructure sharing in the telecom industry, the income earned by Cellular Mobile Service providers (CMSPs) from sharing of infrastructure should not be included in Adjusted Gross Revenue AGR. **This policy initiative will act as a very big incentive for service providers to share infrastructure and will thus enable faster spread of affordable service to far-flung areas of the country.**

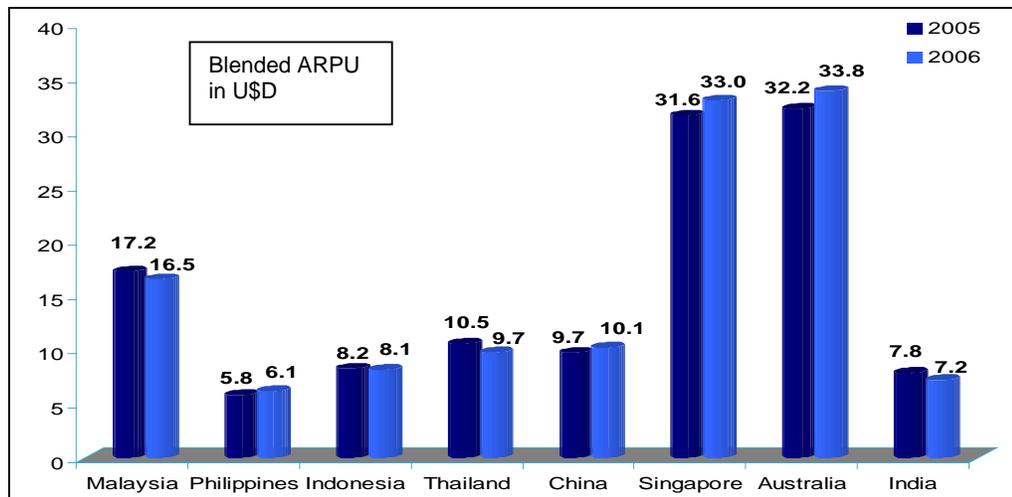
- b. It is submitted that the **License terms and conditions should be amended so as to suitably include the above.**

#### **DETERMINING A CAP ON NUMBER OF ACCESS PROVIDER IN EACH SERVICE AREA**

**Q29. Should there be a limit on number of access service providers in a service area? If yes, what should be the basis for deciding the number of operators and how many operators should be permitted to operate in a service area?**

- a. While dealing with the issue of determining a cap on the number of Access Providers in each service area, the Authority has examined (Para 6.9) the following key considerations that must be taken into account by the licensor while determining the new licenses to mobile telephony service providers :
- **Competitive scenario:** Would new license enhance competition leading to reduction of tariffs, up gradation of quality of service and innovation in services?
  - **Financial sustainability:** Can the market sustain the operation of an additional service provider through subscriber base and spectrum availability?
  - **Availability of Spectrum:** Adequate spectrum for existing and new service providers.
- I. In the context of **competitive scenario**;

- i. It is first submitted that **Figure 17 in the Consultation Paper** (Mobile operators in some countries) **conveys an incorrect impression of the global competitive scenario** in mobile services. By listing down the number of players in the respective frequency bands, the **table does not clarify that invariably the same operator has an allotment in more than one band** (say 900 MHz and 1800 MHz) as is also the case in India. The table thus incorrectly **conveys a higher competitive scenario that is actually the case**. For example, the table **by stating that Brazil has 4 operators in 900 MHz and 8 operators in 1800 MHz, does not clarify that Brazil may be having a total of 8 operators, but it does not have more than 3-4 operators in any one region.**
- ii. **Indian access market is already intensely competitive with 6-8 access operators in every service area.** The Authority has rightly noted (Para 6.12) that **“in India, each service area currently has more competition in the market than most developed nations”**.
- iii. the Authority has also recognized (Para 6.12) that the **HHI Index in India is the lowest as compared to other Asia Pac economies, thereby signifying that the level of competition is the highest in India.**
- iv. The Authority has noted (Para 6.13) that **one of the strong rationale for introducing new service providers in any service area is to bring about a decline in tariffs through competition..** The Authority has also acknowledged that *“the per minute tariff for cellular services in India is perhaps amongst the lowest in the world.”* And recorded the view that *“...any significant reduction in tariffs is unlikely with the introduction of more service providers”*
- v. The Authority has also rightly noted (Para 6.13) that *“...the reduction in tariff as a stand alone objective may hurt the cause of quality of services and infrastructure expansion.”* In this context, it is submitted that **mobile services have, over the years, become extremely affordable** and the same is reflected in the fact that **India has the lowest ARPU even when compared with emerging Asian economies.** From the graph below, it is clear that affordability of service is not an issue/concern in India



Source : PWC Benchmarking Study; Dec 2006

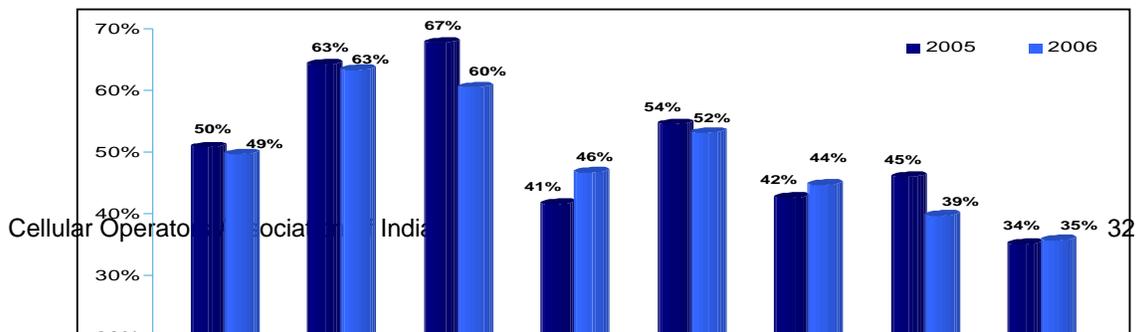
- vi. The Authority has noted (Para 6.14) *“Economic models/theory indicate that there is an ‘inverted U’ relation between competition and innovation Initially, competition and innovation increases with an increase in the number of operators. However, after*

*crossing the optimum point, addition of new operators adversely affects innovation by unduly intense competition.*" It is submitted that India is at the cusp of the inverted 'U' and any further competition into the access segment, will **have an adverse impact on innovation.**

- vii. COAI fully agrees with the observation made by the Authority (Para 6.16) that **introduction of more operators may harm the competitive equilibrium** and will **have a negative impact on the quality of service** and that the threat of **India becoming a high-growth, low-quality market** cannot be underplayed.
- viii. The Authority has acknowledged that because of intense competition and a much larger number of players in the mobile segment in India, **the subscribers per service provider in India are lower than other countries of the world.** We believe that this **itself is an indicator** of the fact that **if competition is increased, it will put a big question mark on the overall financial health of new as well as existing operators.**
- ix. COAI has time and again submitted that **intense competition is having an adverse impact on the financial health of projects**, and is one of the reasons why tele-density is only around 19% - much lower than other Asian economies.
- x. It is thus submitted that the **low tele-density of 19%** is **not indicative** of the fact that **scope exists for introduction of new players but rather**, it brings out the fact that **there exist bottlenecks which have hampered the spread of service and enhancement of tele-density.**
- xi. It is submitted that **the key challenge or the immediate concern** before the service providers **is to urgently enhance the reach of service** to the uncovered areas. **60% of the geographical area and 40% of the population is yet to be covered.** Huge amount of capital expenditure is required towards achieving that objective. Low ARPU implies that the operating margins are not adequate enough to meet this objective.
- xii. It is also submitted that **whilst analyzing the competition scenario**, it is **not just the number of players** in the market that the Authority must consider, but **also the healthy interplay of competitive forces amongst the existing players.** Our **submissions** on this issue have been made **in detail in Section ---**, wherein we have **expressed our concerns on the monopoly market /dominant position of the incumbent operator** and have suggested **application of an asymmetric regulatory approach** to address the same. We have also underlined the **importance of ensuring level playing field amongst all players.**

## II. In the context of Economic and Financial health,

- i. Contrary to what has been observed by the Authority (Para 6.25) 'that the EBITDA margin of the listed companies have increased from 34% to 40%' - **because of the ever declining ARPU, the EBITDA margin of the service providers have more or less stagnated at around 35% level.** Also the EBITDA margins of service providers in India are the lowest when compared with other Asia Pac economies.



Source : PWC Benchmarking Study; Dec 2006

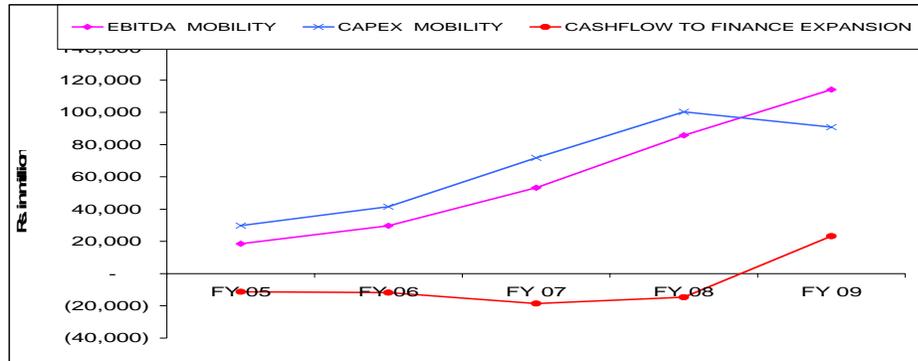
- ii. The fact that Service Providers in India have the lowest EBITDA margin has to be seen in light of the fact that **India is NOT a mature market. An EBITDA margin of 35% may be acceptable in a mature market, but in the case of India where the mobile coverage is yet to reach 60% of the area and 40% of the population, the EBITDA margin – being lower even than the mature markets – does not leave adequate funds for enhancing penetration of service.**
- iii. In line with the low EBDITA margins, the Service Providers in India have a far lower Return on Capital. TRAI itself has acknowledged that the Return on Capital Employed (ROCE) in India is much lower than China, with ROCE of mobile services in India being one third that of the mobile service providers in China.

	China	India
FISCAL YEAR	Dec 04	Dec 04
RoCE – Basic (%)	14.79%	10.92%
RoCE – Mobile (%)	<b>22.87%</b>	<b>7.83%</b>

Source: TRAI Study Paper on Telecom Industry of India and China June 2005

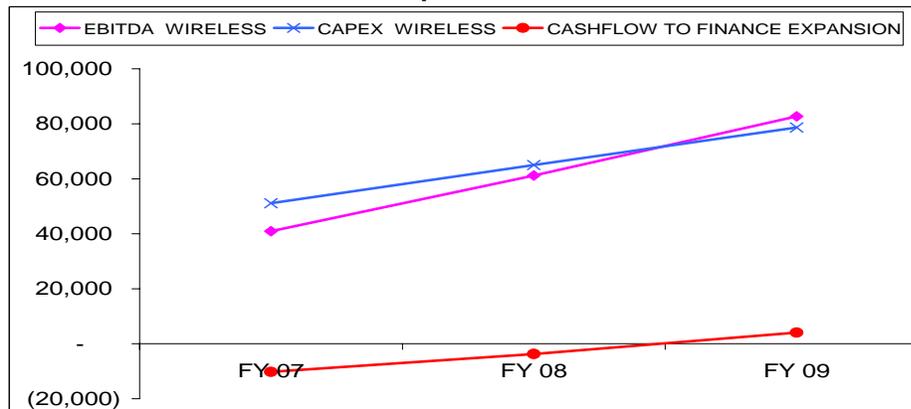
- iv. The above only **brings out the fact that there is a need to enhance the investment attractiveness of the Indian mobile sector vis-à-vis other economies to enable expansion of service by attracting greater investment.**
- v. In the context of financial health of the sector, it is very pertinent to mention that **even after being in service for more than a decade; companies still have negative cash flows. This would NOT have been acceptable in any other sector** and this is the factor which has severely hampered the spread of service.
- vi. Illustrative cases of negative cash flows prevailing in the mobile sector are shown in the graphs below :

### Operator 1



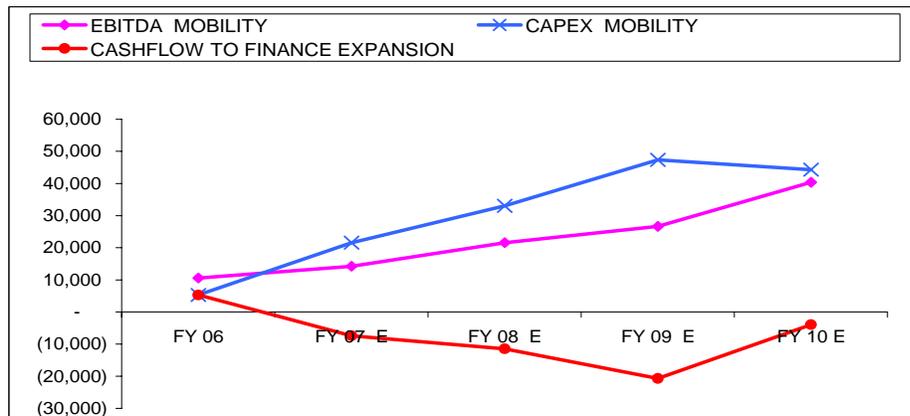
Source: Macquarie Research; April 2007

### Operator 2



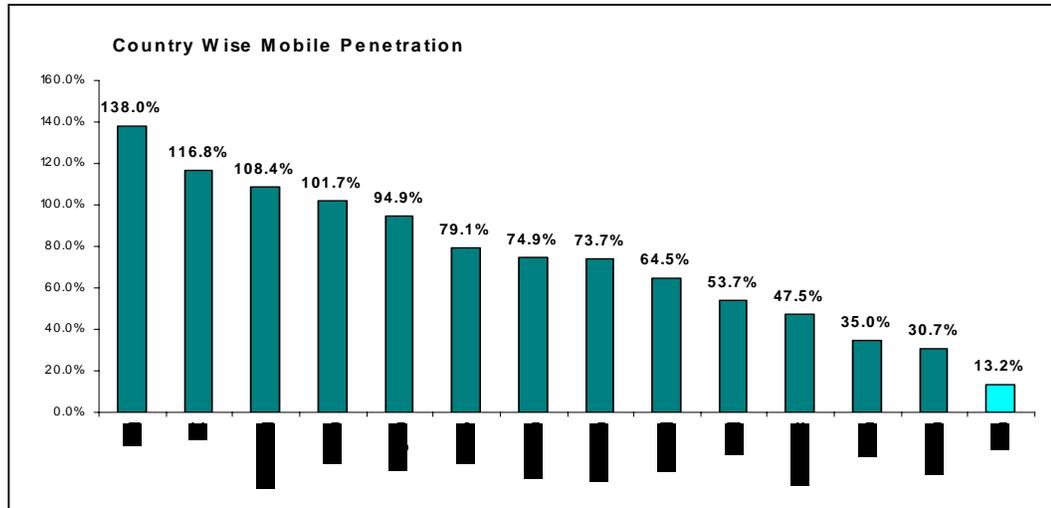
Source : Macquarie Research; November 2006

### Operator 3



Source : Macquarie Research; April 2007

- vii. Low ROCE and negative cash flow implies that service providers **do NOT have adequate funds for expansion of service** – and as stated above, **this has acted as a stumbling block for the enhancement of tele-density** – rather than low tele-density being an indicator of there being enough scope for introduction of new players.
- viii. **This is one of the most powerful reasons for tele-density in India to be below global benchmarks** – and that too in spite of the mobile service in India being the most affordable.



Source: Merrill Lynch Global Matrix 4Q 06

- ix. Lastly and most importantly it is pertinent to mention that **one of the key role of the TRAI is to ensure orderly growth of the telecom sector.** The TRAI Act charges the Authority with the responsibility

*“...to protect the interest of service providers and consumers of the telecom sector, to promote and ensure orderly growth of the telecom sector...”*

### III. In the context of Availability of Spectrum;

- i. It is a fact that spectrum which is the most vital raw material to offer mobile services is in extremely short supply and thus it is most anomalous to have a policy of open competition in an environment of limited availability of spectrum.
- ii. It is submitted that once a service provider has been granted a cellular license, he **must be assured of adequate spectrum** to offer his cellular services. This is because the licensee is mandated under both license as well as regulation to maintain QOS standards.
- iii. This aspect has also been stipulated by policy makers and regulators that spectrum requirements of existing licensees must be considered before providing for entry of new licensees.
  - This has been enunciated in NTP-99 which stated that “**Availability of adequate frequency spectrum is essential** not only for providing optimal bandwidth to every operator but also for entry of additional operators...” Further that “Considering the growing need of spectrum for communication services, there is a **need to make adequate spectrum available**” and “There is a need to have a transparent process of allocation of frequency spectrum which is effective and efficient.”
  - TRAI too, in its **recommendations on 4th CMSP** had stated “On economic grounds, it appears that it may be feasible for the fourth operator to enter in some service areas but this issue is not independent of the availability of spectrum to the previous three operators. There is a **view that additional spectrum, if available,**

should be **given to the existing operators** to enable them to provide service in a more cost effective manner. Additional spectrum will also **result in improved quality of service**. ... Eventually, sustaining competition requires that the existing players are able to function in an efficient manner with adequate band-width. In the circumstances a fair balance between the two objectives of increasing competition on the one hand and improving the quality, coverage and price-efficiency of the service on the other will have to be struck so that the larger objective of providing quality services at affordable prices is not jeopardized. A sub-optimal cost structure and quality of service may finally turn out to be detrimental to the growth of tele-density notwithstanding a higher number of service providers.”

Thus the recommendation of the fourth cellular operator was made by TRAI only after ensuring adequate availability of spectrum.

- Accordingly **when TRAI looked into the issue of permitting /allowing open competition** in cellular in February 2003, it had stated “TRAI in its previous recommendations dated 24th October, 2000 relating to the entry of the fourth cellular mobile service provider had stated that in various service areas additional spectrum, if available, should be given to the existing operators to enable them to provide service in a more cost effective manner. This recommendation was made by the Authority to address the problem faced by existing players relating to engineering an optimal network which could meet the QOS norms specified by the Authority in its QOS Regulation. Eventually, sustaining competition requires that the existing players are able to function in an efficient manner with adequate bandwidth and are able to build a network without avoidable investment.”

In light of the above, TRAI reiterated its view “that **both these objectives of increasing competition on the one hand and improving the quality, coverage and price-efficiency** of the service on the other will **have to be achieved** so that the larger objective of providing quality services at affordable prices is not jeopardized.”

Accordingly TRAI recommended that “**induction of additional mobile service providers** in various service areas can be **considered if there is adequate availability of spectrum for the existing service providers** as well as for the new players, if permitted.”

- iv. In the above context, it may also be noted that **paucity of adequate spectrum** for existing licensees **have resulted in serious QOS issues** (in fact the issue of QOS is presently before the TDSAT), which have been **highlighted by the Regulator from time to time**.
  - In fact in its **study paper on Quality of Service** of Cellular Mobile Service in Delhi on September 1, 2005, TRAI noted “The **operators are facing shortage of spectrum** due to high growth and delay in allocating additional spectrum. This is also an **issue affecting the service quality** of mobile services all over Delhi.”
  - In a similar **study carried out for Mumbai** on November 22, 2005, TRAI noted that “The **operators are facing shortage of spectrum** due to high growth and delay in allocating additional spectrum. This is also an **issue affecting the quality of service** of mobile services all over the Mumbai as due to the lack of the spectrum; the operators are not able to optimize their frequencies to generate a good voice quality in CBD areas in peak hours.”

- v. It is clear from the above that **it is of paramount importance to ensure adequate spectrum for existing licensees before considering the spectrum requirements of new licensees.**
- vi. The spectrum requirements of existing licensees must be safeguarded upto at least 2x15 MHz) before any subsequent licensee is considered. This is **not to say that the spectrum should be reserved**, but rather that the **Government should be able to ensure that adequate spectrum will be available for existing licensees when they become eligible** for the same, before awarding a new license. **To illustrate,**
  - If an existing GSM licensee has got 8 MHz spectrum and is eligible for the next tranche of spectrum, he will get precedence over a GSM licensee applicant.
  - if an existing licensee is as yet not eligible for additional spectrum as per the roadmap, and there is a GSM licensee applicant for that area, then the Government, who is aware of both the rate of growth as well as the progressive availability of spectrum, should be in a position to ensure that adequate spectrum will be available for the existing licensee before awarding a new license / allotting spectrum to another operator..
- vii. In this context it may be noted that **for GSM, the theoretical maximum spectrum available** in the 900 MHz and 1800 MHz bands **is a total of 100 MHz.** Further the **Government has laid down a roadmap of at least 2x15 MHz for each GSM operator.** Thus before any new licenses can be considered in the sector, it must be ensured that the spectrum requirements of existing licensees are safeguarded to the extent of at least 2x15 MHz per operator.
- viii. It may also be noted that this **quantum of 15 MHz per operator is well below international best practices (25 MHz per operator)**
- ix. It may not be out of place to point out that **out of the theoretically available 100 MHz, the actual present spectrum availability is only around 35 MHz which is far lower than what is required to meet the needs of even the existing operators/licensees.**
- x. In fact the Authority has itself noted (Para 6.42 and 6.43) that the **requirement of the existing operators is “about 20 MHz more than the existing available spectrum”** and that “even the 20 MHz spectrum in 1800 MHz band which is likely to be vacated by the Defence in the near future, will just be sufficient to meet the requirements of the existing operators and that too, upto December 2007 only” and further “to meet the present growth rate of the existing licensees beyond December 2007, additional spectrum will be required to be coordinated.”
- xi. In fact, even **assuming a most optimistic scenario of a doubling in the availability of spectrum** this would **at best be sufficient to meet the requirements of existing operators/licensees only.**
- xii. It may also be noted that **if the number of operators increases, the amount of spectrum that each operator can access reduces** which will not only have a **negative impact on QOS** but will also entail **much higher investments in infrastructure** to re-use the limited spectrum.
- xiii. In this regard, the Authority too has noted (Para 6.37) that “**Another key issue while determining the maximum limit on number of operators in any service area is the status of spectrum availability. If the number of operators increases, the amount**

**of spectrum that each operator can access reduces as the total spectrum available is limited in each service area. If share of spectrum per operator is reduced, then each operator will have to invest more in their capital, i.e. in the network infrastructure to put a larger number of BTSs in the same area in order to reuse spectrum more.”** and further that (6.38) **“while this might be desirable to an extent from the point of view of encouraging spectrum efficiency, it is not conducive to the development of the sector. It is self evident that that the increased capex forces higher investments and reduces returns on capital expenditure, thus affecting service improvements, in the long run.”**

- xiv. It is also submitted that **there is a limit to the amount of infrastructure that can be put in place by an operator. Indian GSM operators have already achieved inter site distances of less than 100 metres in certain congested areas which is a far closer BTS density than that achieved by any other country in the world. Not only does this high BTS density have serious implications on capex, but can also be a factor in deteriorated QOS.**
- xv. The Authority has rightly noted (Para 6.16) that **“the threat of India becoming a high-growth, low quality market cannot be underplayed.”**
- xvi. **Thus, availability of spectrum** which is a scarce and limited resource **coupled with the Government’s spectrum allocation guidelines will have to be a key consideration while determining the number of access providers** in every service area.
- xvii. **The Authority has recorded a view (Para 6.44) “that the case of scarcity of spectrum even for the existing operators is primarily based on the spectrum allocation criterion of the WPC ....This criterion is linked to the subscriber base of the operator for the whole service area and does not take into consideration the subscriber density w.r.t. the geographical area.”**
- xviii. In this context, we would like to submit that we **fully endorse the subscriber linked spectrum allotment guidelines** that have been laid down by the Government and we **firmly believe that this approach must be continued with** as it is the only approach that will meet the spectrum requirements of service providers in an environment of severe spectrum paucity.
- xix. Further, the **commitment to at least 15 MHz spectrum for every GSM operator was a part of the compromise settlement package between the industry and the Government** in December 2003 when the GSM industry /COAI **committed to withdraw the ongoing litigation** in the Supreme Court concerning the challenge to **WLL (M) and the unified access licence regime on the condition inter alia that**
  - **As per the accepted recommendations of the DoT Spectrum Committee, the GSM cellular operators should be allocated 15 MHz spectrum for each service area per operator.**
  - **Release of additional spectrum should be based on the norms to be recommended by TRAI and finalized by DoT to achieve optimal utilization of capital investment, operating costs and desired quality of service.**
- xx. A copy of the letter written by the industry to the then Hon'ble MoC .is attached herewith as Annexure-4. It is submitted that **any attempts to deviate from the commitments that were a part of the compromise /settlement package could lead to a fresh round of disputes.**

- xxi. We do **however understand the concerns with regard to optimal utilization of spectrum**, but we **maintain that the existing roadmap of upto 15 MHz per GSM operator, prescribed on a service-area wise basis, must continue to be adhered to.**
- xxii. It may be noted that it was only in March 2006 that the subscriber linkages for upto 15 MHz per GSM operator was prescribed on a service area basis. This was done to bring GSM industry at par with the CDMA stakeholders and to ensure level playing field. .
- xxiii. In this context however, what could be considered is **a review of the subscriber linkages for C Category service areas.** It is noted that the **subscriber link criteria for category C Circles is 50% or less than the subscriber link prescribed for Category A Circles.** As a result of the lower subscriber linkages, **spectrum which is a limited resource, gets used up far quicker** in the Category C Circles, which could have **implications for full play of competition in such service areas.**
- xxiv. It may be noted that the Category C circles have **been growing at a much faster rate** than Category B Circles **indicating that there is a great growth potential** in these areas. It may therefore be **desirable to address this anomaly and review / correct the subscriber linkages for Category C Circles** in light of the above observations.
- xxv. Needless to say that the **linkages for allotment of CDMA spectrum** would also have to be **appropriately revised to honour / adhere to the 2:1 linkage** maintained by the Government between GSM and CDMA spectrum.
- b. In view of **all the above considerations and submissions**, we are thus of the view that the **present policy of open competition is not sustainable and must be reviewed.** We agree with the view of the Authority (Para 1.18) that “it is timely to examine the scope and sustainability of new applicants for license in the wireless mobile sector.”
- c. It is submitted that **both policy – NTP-99 as well as the TRAI Act clearly requires** the Government to mandatorily seek the recommendations of TRAI in respect of ‘**need and timing**’ for the introduction of a new service provider and not just for a new ‘type’ of service provider. We **thus strongly disagree with the understanding** that “**this provision refers to new types of license only.**”
- d. It is submitted that it is the mandate of the Authority under the Act to protect the interests of service providers and consumers as also ensure orderly growth of the market and that consideration of need and timing for the introduction of a new service providers, after taking into account competitive scenario, financial sustainability and availability of spectrum” is a key critical requirement to ensure achievement of the objectives under the Act.
- e. In this context, it may also be noted that the **Authority recommendations for the 4<sup>th</sup> CMSP license** in 2001 was not for a new type of license and further that while considering the issue, the Authority has **examined both the financial and economic considerations** for introducing more competition and **also the issue of availability of spectrum.**
- f. It is submitted that the **issue of need and timing would necessarily include an examination** of all the above considerations, viz, **competitive scenario, economic and financial health** of the sector and most importantly, **availability of spectrum.**

- g. It is thus submitted that that the **Authority should seriously consider capping the number of service providers, taking into account all the above considerations.**

**Q30. Should the issue of deciding the number of operators in each service area be left to the market forces?**

- a. At the outset, it should be noted that the supply of spectrum, which is the most essential resource for mobile services, is completely regulated by the Government and is in serious short supply. It is submitted that when the spectrum is not available in the market place, it is absolutely absurd to even consider leaving the number of players to market forces.
- b. In view of the extreme paucity in spectrum, **already operators are offering services with spectrum that is far below their eligibility levels.** The vacation and coordination of additional spectrum in the 1800 MHz band is taken a far longer time than expected. In fact additional spectrum availability has been in the pipeline for more than six months now. Given the aggressive growth that the industry is maintaining, sub optimal spectrum allotments have an **adverse impact on the quality of service.**
- c. It is thus submitted that **in the unique Indian environment** it would be **absolutely anomalous to leave the number of players to market forces.** In fact, **such an approach would do serious damage to the healthy growth prospects of the industry.**
- d. **Operators** desirous of entering the market **may take their chances and acquire licenses and join the queue** for allotment of spectrum, and **given the Government policy would be eligible for and entitled to receive spectrum on the same basis as other licensees / operators.**
- e. In this context, we would like to **draw attention to the case of certain new licensees,** who have been granted licenses, but have not yet been allotted their initial spectrum. As per media reports, these licensees **may be asked to start offering fixed line services in order to meet their rollout obligations.** It is submitted that such an action would be an **unjust imposition on licensees** that are desirous of offering services only on the wireless platform. **By unifying the license for both fixed and mobile in 2003, licensees have no choice but to acquire a UAS license even if they want to offer only mobile services.** Having granted a license, it is **incorrect and unfair to deny them spectrum and instead mandate them to offer fixed services to meet the rollout obligations.** **Such an approach would not only be legally incorrect/untenable, but also retrograde by any global standards.** A copy of the media report is attached herewith as **Annexure-5.**
- f. **Such a suggestion verges on absurdity.** It is like suggesting that a **cricketer with a sports visa going to play cricket in Sharjah, be asked to go and play tennis as the cricket pitch is not ready !!!**
- g. In light of the above, we **strongly believe that decision on the number of access providers in every service area cannot and should not be left to market forces, but should be decided by the Government / Regulator,** keeping in mind inter alia, the competitive scenario, the economic and financial health of the sector and the **availability of spectrum vis-à-vis the spectrum allocation guidelines of the Government.**

\*\*\*\*\*

10<sup>th</sup> January'2006

Spectrum Allotment to GSM Operators

1. As per the latest available update, (March 2004) it may be noted that as per **international best practices, the average spectrum allotted to GSM operators is 2x25.21 MHz per GSM operator**. This is as per the tabular comparison of spectrum allotted to select GSM operators in Europe and Asia Pacific as given below :

	<b>Name of the Country</b>	<b>Average GSM Frequency per operator (in MHz)</b>
1	Belgium	30.00
2	Denmark	27.20
3	France	36.20
4	Germany	20.00
5	Italy	17.90
6	Netherlands	21.00
7	Spain	21.40
8	Sweden	23.50
9	Switzerland	18.80
10	UK	26.60
11	China	22.50
12	Malaysia	18.00
13	Thailand	19.00
14	Finland	28.60
15	Turkey	52.60
16	Hungary	23.20
17	Iceland	22.00
18	Ireland	21.00
19	Latvia	36.50
20	Luxembourg	23.60
21	Malta	20.90
22	Norway	19.60
23	Slovak Republic	20.80
24	Cyprus	37.00
25	Czech Republic	22.24
	<b>Average</b>	<b>25.21</b>

Source : 1. European Radiocommunications Office  
2. Data from concerned operators  
3. EMC Database

\*\*\*\*\*

24 December 2003

**Shri Arun Shourie**

Hon'ble Minister of Communications & IT and Disinvestment  
Ministry of Communications & IT  
Electronics Niketan  
6, CGO Complex  
Lodhi Road  
New Delhi – 110 003

Respected Sir,

As you are aware, the GSM cellular industry has been the pioneer in developing the mobile service industry in this country. The industry has invested over Rs. 25,000 crores to develop a world-class cellular infrastructure and is presently delivering high quality cellular mobile services to over 22 million consumers in over 1700 cities and towns all across the country.

However the industry has been experiencing a huge financial strain which has been brought to your attention through our letters dated 2-12-2003, 17-12-2003 and 19-12-2003.

The industry reposes complete confidence and trust in the Government for a sympathetic examination of our submissions. The industry also remains committed to work with the Government towards :

- a. Growth and development of a healthy and viable cellular mobile industry and
- b. Provision of equal opportunities and level playing field to all players both regional and national as envisaged in NTP-99.

In this connection, we wish to respectfully suggest the following for your kind consideration:-

**A. FINANCIAL ISSUES**

- i. To provide suitable financial assistance to all cellular companies we request a reduction in revenue share licence fee for all GSM cellular operators.

- ii. Further, in view of the more severe financial strain on the 1<sup>st</sup> and 2<sup>nd</sup> GSM Circle cellular operators, primarily due to their entry fee being much higher than the benchmark value of 4<sup>th</sup> CMSP entry fee, it is requested that additional financial support, which could include a further reduction in revenue share license fee, be provided to all such 1<sup>st</sup> & 2<sup>nd</sup> GSM Circle cellular operators to aid their viability and competitiveness in the marketplace.
- iii. To alleviate the distress due to enormous high cost debt of some companies, it is requested that the Government may kindly advise the leading Financial Institutions to suitably restructure this debt and reduce the interest burden.
- iv. Financial Institutions may be also requested to provide, to the companies desiring such help, fresh funds to the extent possible from items (i) & (ii) above.

## **B. OTHER ISSUES**

### **i. Raising Finances from Foreign Sources :**

To enable meeting the very large fund requirements of this industry, the Government is requested to :

- a) Increase the total FDI /FII limit to 74% with FII investment permitted upto 25% over and above the sectoral cap of 49%,
- b) Relax the applicable ECB restrictions to allow easy access to foreign debt.

### **ii. Intra-circle Mergers & Acquisitions :**

- a) Government may kindly allow Intra-circle Mergers & Acquisitions and issue necessary guidelines for the same. In view of the criticality of spectrum for growth, it is requested that the merging parties should each be permitted to retain their already allocated and entitled spectrum.

### **iii. Spectrum**

- a) As per the accepted recommendations of the DoT Spectrum Committee, the GSM cellular operators should be allocated 15 MHz spectrum for each service area per operator.
- b) Release of additional spectrum should be based on the norms to be recommended by TRAI and finalized by DoT to achieve optimal utilization of capital investment, operating costs and desired quality of service.

#### **iv. Inter-Circle Connectivity**

- a) We request the Government to kindly consider allowing direct inter-circle connectivity for operators in the interest of the consumer and optimized costs.

We also hope that the various other issues pertaining to the industry including those relating to the financial strain of some circle cellular operators would be considered by the Government through an ongoing dialogue.

#### **The Way Forward :**

Industry reposes complete confidence and trust in the Government for a sympathetic examination of the above-mentioned requests. We believe that this would enable all the GSM cellular operators both regional and national, to most energetically participate in the growth programmes of the Government for attaining the national tele density objectives.

To create a suitable climate for such an exercise, the COAI commits to withdraw the ongoing litigation in the Supreme Court concerning the challenge to WLL (M) and the unified access licence regime. Further, in the event of any attempt to revive this above litigation by any party, the COAI will fully support the stand of the Government.

Lastly, we would like to reiterate that the cellular industry is committed to the growth of telecom in the country and we look forward to your continued guidance and support in this regard.

Kind regards,

Sincerely yours,

**CHAIRMAN**

**VICE CHAIRMAN**

**DIRECTOR GENERAL**

TVR/COAI/072  
May 8, 2007

**Shri N Pameswaran**  
DDG (Access Services)  
Department of Telecommunications  
Sanchar Bhawan  
20 Ashoka Road  
New Delhi 110 001

Dear Sir,

**Amendments to License Agreement – Clauses Pertaining to Interconnection**

This is with reference to **the meeting on** Provisioning of Interconnection to Private CMSP's, held on **April 24, 2007** wherein you **indicated that amendments in the License agreement were being considered and very kindly asked us to make our submissions on interconnection vis-à-vis the License.**

**Accordingly, please find attached our submissions on suggested amendments to Clause 26 and 27 of the UAS License** pertaining to Interconnection, **along with the justification for the same.** These are attached herewith as Annexure-1.

**We hope that our above submissions will merit your kind consideration and support.**

We would **also most deeply appreciate if a draft of the proposed amendments in the License conditions could be shared with the industry,** before these are finalized by the Government.

Sincerely,

**T.V. Ramachandran**  
**Director General**

**Cc : Shri M. Sahu, IAS, Joint Secretary (T), DoT**

Encl:

**COAI's PRELIMINARY SUBMISSIONS TO THE  
WORKING GROUP SET UP TO REVIEW ISSUES ON INTERCONNECTION**

**I. FUNDAMENTAL PRINCIPLES OF INTERCONNECTION**

The WTO Reference Paper and GATT framework lays down that :

**1. Interconnection to be ensured**

Interconnection with a major supplier will be ensured **at any technically feasible point** in the network. Such interconnection is provided:

- (a) **under non-discriminatory terms, conditions** (including technical standards and specifications) **and rates** and **of a quality no less favourable** than that provided for its own like services or for like services of non-affiliated service suppliers or for its subsidiaries or other affiliates;
- (b) **in a timely fashion, on terms, conditions** (including technical standards and specifications) **and cost-oriented rates** that are **transparent, reasonable, having regard to economic feasibility**, and **sufficiently unbundled** so that the supplier need not pay for network components or facilities that it does not require for the service to be provided; and
- (c) upon request, at points in addition to the network termination points offered to the majority of users, **subject to charges that reflect the cost of construction of additional facilities.**

**2. Public availability of the procedures for interconnection negotiations**

The procedures applicable for interconnection to a major supplier will be made publicly available.

**3. Transparency of interconnection arrangements**

It will be ensured that **a major supplier will make publicly available** either its interconnection agreements, or a **reference interconnection offer.**

**4. Interconnection: dispute settlement**

**A service supplier requesting interconnection** with a major supplier **will have recourse**, either:

- (a) **at any time or**
- (b) **after a reasonable period of time** which has been made publicly known

**to an independent domestic body, ... .., to resolve disputes** regarding appropriate terms, conditions and rates for interconnection within a reasonable period of time, to the extent that these have not been established previously.

The above are the fundamental principles of interconnection that must be clearly enunciated and adopted.

## **II. INDUSTRY ISSUES ON INTERCONNECTION**

### **A. Provision of Interconnection**

1. While on one hand interconnection has been made mandatory for the Licensees, various provisions of the License Agreement refer both i.e. to the service provider mutually negotiating the terms of interconnectivity and also to the connectivity being within the overall framework of interconnection regulations issued by the TRAI from time to time and compliance with the TRAI's Regulations. Reference is drawn to the relevant clauses of the UAS License, which are reproduced and attached herewith as Annexure-1
2. This **reference to both mutual agreement and compliance with TRAI's Regulations has given rise to interpretative controversies and disputes**, which have also been reflected in the judgment and orders of the Hon'ble TDSAT. For example, in its judgment in Appeal No. 11 of 2002 dated 27.4.2005 (RIO Case);
  - a. TDSAT noted that the license in several places gave flexibility to the Licensee to enter into mutually negotiated interconnection agreements while in one clause it required the Licensee to comply with any orders, etc issued by TRAI. TDSAT opined that if this latter clause were to be read as an over arching provision, then it did not make sense for other clauses to talk about "mutual agreement subject to compliance of prevailing orders, direction, determination or regulation issued by TRAI" TDSAT further noted that in many clauses the conditions had not been made "subject to TRAI determination thereby implying that these are terms set by the Licensor which cannot be altered.
  - b. As a result TDSAT concluded that a harmonious way of interpreting the various clauses would be that some of the clauses merely stipulate the terms, some allow the Licensee to interconnect on mutually negotiated terms, some provide that the

mutual negotiated arrangements would be subject to compliance with the orders, etc of TRAI and some which prescribe the standards of interfacing, interconnection routing, standards for quality of services.

- c. TDSAT further concluded that **importance has been given to mutual negotiations and in some specified matters the mutually negotiated arrangements would need to be in compliance with orders / directions / regulations of TRAI.**
3. Further, there have also been **concerns and disputes with regard to the terms of license vis-à-vis the powers of the TRAI under the Act** in the context of which **TDSAT has held that any attempt by TRAI to facilitate interconnection would need to be in consonance with the conditions of the license** and the powers available to TRAI under the Act.
- a. In this regard, TDSAT has relied on the Delhi High Court judgment in MTNL Vs. TRAI (AIR 2000 Delhi 208) and held, inter alia, that **when the Central Government puts the terms and conditions of interconnectivity in the license it is not for the TRAI to say that these conditions are of no use or suo motu vary or override them.** There is nothing in the Act, after its amendment, which would take away the effect of the law, as laid down by the High Court in the case of MTNL. Principles laid down in that judgment are quite explicit. **TRAI is now empowered to fix the terms and conditions of interconnectivity between the service providers to whom licenses have been issued prior to the amendment to the Act in 2000.** The **extent to which this power can be exercised is to bring harmony with the terms of interconnectivity of licenses issued after the amendment of 2000** so that it is in conformity with the TRAI Act and the principles laid down in the said judgment.
  - b. TDSAT has also quoted from the **High Court's judgment in MTNL case that** “For all the above reasons, it would have to be held that the authority has no power to issue any regulation which in any manner converts the merely recommendatory or advisory function into a directory function. The directions and regulations which the authority may issue and/or frame must necessarily be within the framework of the said Act. The **authority has no power or function to change or vary rights of parties under contracts or licenses. It can only regulate within the terms and conditions of the license**”.

4. Thus **unless the TRAI Act is amended or the TDSAT's above holding is set aside /** changed by the Supreme Court (matter is pending before the Supreme Court in Civil Appeal No. 3298 of 2005 - TRAI Vs. MTNL, **the above continues to be the law of the land.**
5. Thus **the present position that emerges is that:**
- a. **Negotiations** between the parties **have been given primacy in the license without taking into cognizance the asymmetric market power of the interconnecting parties.**
  - b. **TRAI has no power or function to change or vary rights of parties under the contracts or licenses** as a result of which **private operators continue to be subjected to one sided /asymmetric/non-reciprocal interconnect arrangements.**
  - c. TRAI is empowered to fix the terms and conditions of interconnectivity between the service providers to whom licenses have been issued prior to the amendment to the TRAI Act in 2000. The extent to which this power can be exercised is to bring harmony with the terms of interconnectivity of licenses issued after the amendment of 2000 so that it is in conformity with the TRAI Act and the principles laid down in the MTNL judgment.

**Suggestions:**

- a. **Fundamental principles** relating to Interconnection **in line with those enunciated in WTO in Section I above should clearly be prescribed in the License Agreement** itself.
- b. In respect of **specific provisions**, it should be **clearly specified** in the License the **areas where**
  - **TRAI should fix the terms** of Interconnectivity
  - **The parties should mutually negotiate** the terms of interconnection **in a timely fashion** (a maximum time period for this may also be specified in the license)
- c. Further, **in case of mutual negotiations**, it should also be **clearly prescribed** that the **negotiated terms** should be **within the overall parameters of the Regulations** issued by TRAI and that **in case of conflict; the TRAI's Regulations must prevail.**

**B. Direct Connectivity & the Interconnect Seeker/Provider Concept**

**B.I. Within the Licensed Service Area**

1. **NTP - 99 provides that Direct interconnectivity between** licensed CMSP's and any other type of service provider (including another CMSP) in their area of operation including sharing of infrastructure with any other type of service provider **shall be permitted.**
2. The **above provision was made in public interest;** so that all operators directly connect with each other as a result of which unnecessary use of third network resources would be avoided leading to savings that would in turn, translate into reduced /lower tariffs.
3. Thereafter the **License Agreements were also amended** and Clause 26.6 of the License Agreement provided that **Direct Interconnectivity among all Telecom Service Providers in the licensed service area was permitted.**
4. **All the private cellular operators as also MTNL have already directly connected with each other.** However, **BSNL CellOne has not directly connected** with many of the Cellular operators and is transiting CMSPs calls meant for BSNL's cellular mobile network through its PSTN.
5. **BSNL CellOne agrees to directly connect with CMSPs only if CMSPs approach BSNL as interconnect seeker** (i.e. pay for the costs of upgrading networks).
6. Clause 27.3 of the UAS License stipulates that **the network resources including the cost of upgrading/ modifying interconnecting** networks would be **mutually negotiated** keeping in view the orders and regulations issued by the TRAI from time to time.
7. **TRAI considered the issue and vide its direction dated 27.07.2003 and** thereafter in its **October IUC Regulation dated 29.10.2003, made direct connectivity mandatory.** However, these were **challenged by BSNL** before TDSAT.
8. TDSAT in its order and judgment dated 03.05.2005 in Appeal No.31 of 2003 - BSNL Vs TRAI and in Petition No.20 of 2004 - COAI & Ors Vs.BSNL & Ors.:

- a. Noted that the infrastructure created for interconnection entailed some expenditure and also that this should be shared between the two operators who by mutual agreement are going to have direct connectivity.
  - b. Stated that wherever, till the date of the order, infrastructure had been created for connections from the Cellular Operators to Level-1 TAX the same would be used for the termination of calls to the PSTN subscribers as well as to CellOne subscribers.
  - c. Directed that in the interest of level playing field, direct connectivity between the CMSPs and the BSNL CellOne may be encouraged in the future by mutual agreement on the basis of costs being shared between the CMSP and BSNL CellOne".
  - d. Observed that till such time the matter was comprehensively dealt with by TRAI and final decision is taken thereon by the licensor, direct connectivity should remain permissible".
9. Thus in the interest of level playing field TDSAT encouraged direct connectivity but did not hold that it is mandatory.
10. Secondly, TDSAT has not settled the **issue of Interconnection Seeker and Provider**. Even TRAI's Regulations do not come to the rescue of the Operators in this regard. As per Clause (xi) of the October IUC Regulation, "Interconnection Provider" means the service provider to whose network an interconnection is sought for providing telecommunication services and as per clause (xii) thereof, "Interconnection Seeker" means the service provider who seeks interconnection to the network of the interconnection provider. The issues are pending before the Supreme Court in Civil Appeal Nos. 6049 of 2005 - BSNL Vs. COAI, 3299 of 2005 - TRAI Vs. BSNL and 24497 of 2005 - COAI Vs. BSNL.

## **B.II. Integration of 4 States**

1. **On 20.5.2005 Government of India** corrected a subsisting anomaly and **allowed Inter-service Area connectivity** between Access provider **within Mumbai and Maharashtra, Chennai and Tamil Nadu, Kolkata and West Bengal and U.P. (East) and U.P. (West)**. **This decision too, was taken in consumer interest.**

2. **All the private CMSPs** in these above licensed service areas **expeditiously established direct connectivity amongst themselves** and **soon started offering** inter service area calls between these four states at local call rates, thus meeting the desired public interest objectives of the Government.
3. **BSNL however required the private CMSPs** to first **sign an addenda** to their existing interconnect agreements and **then apply for POIs** (which can take as long as 12 months as per the existing interconnect agreements) **to secure direct inter service area connectivity** with BSNL CellOne.
4. **In the meantime** however **existing arrangements had to continue** and thus inter service area calls to **BSNL CellOne** in these 4 states **continued to be treated and tariffed as inter circle (STD) calls**.
5. **As direct connectivity had not been mandated private operators have no option but to comply with the process laid down by BSNL**.

**Suggestions:**

- a) The **License may be amended** to provide that **direct connectivity is mandatory**.
- b) The **License Agreement** may clearly provide for a comprehensive definition of "Interconnection Provider" and "Interconnection Seeker".

**C. Reference Interconnect Offer (RIO)**

1. TRAI came out with an RIO Regulation in July 2002 that provided inter alia that :
  - a. Operators with SMP publish an RIO within 90 days of issue of the Regulation
  - b. This RIO would be based on the Model RIO and guidelines published by TRAI
  - c. The RIO would stipulate the terms and conditions on which interconnection would be provided
  - d. The above RIO would be submitted to TRAI for its approval and be published only after TRAI has approved the same
  - e. The published RIO would form the basis for all interconnection Agreements to be executed thereafter
  - f. A published RIO could be modified only with the prior approval of TRAI



4. It must be **appreciated that it is very difficult for individual private operators to negotiate with the incumbent operators like MTNL / BSNL** and that **while in theory the emphasis is on mutual negotiations, in actual fact, this results in a unilateral prescription of terms and conditions on a take it or leave it basis by the SMP operators**

**Suggestions:**

- a. **While Operators may be given the freedom / flexibility to negotiate** the terms and conditions of interconnection, but it must be provided in the License that **in the absence of agreement on the terms of interconnection** between the two interconnect parties, **the Model RIO published by TRAI must prevail.**
- b. **The license must be amended** to incorporate a provision to this effect.

**D. Timely Provision of Interconnection**

1. The **License Agreement does not provide for any time period** within which interconnection sought must be given.
2. The **Interconnect agreements that have been signed by the private operators** with BSNL **provide for a time period of 12 months to BSNL** to meet/fulfill the POI requests of the operators.
3. **In 1997, the TRAI** in its adjudicatory capacity under the un-amended TRAI Act 1997, had (vide its order dated 29.04.1997 in Petition No. 1 of 1997 - Aircel Digilink India Ltd. & Ors. Vs Union of India & Ors) **directed DoT (now BSNL)** that subject to technical integrity of the network and technical feasibility, to grant both way connectivity at Points of Interconnect and further **to grant Interconnections within 90 days of the request being received.** It was clarified that if for some reason, request for Points of Interconnect cannot be granted within the said period then DoT (now BSNL) could apply to TRAI for extension of time but such request must be made not later than at least 30 days before the expiry of the said 90 days period. To the best of our knowledge, this order of TRAI has not been challenged. However, for whatever reasons and circumstances, this order did not get fully implemented.
4. However, subsequently when **TRAI issued its RIO Regulation in July 2002, it provided 180 days (6 months) for provision of POIs and retained the 90 day provision only in cases of launch of service.** The key provisions of the RIO in this regard were as follows :

- a. Once the Interconnection provider received a formal demand for interconnection, he would within 30 days, either accept the demand or offer an alternative proposal for meeting this demand fully or partially along with approximate dates & issue the relevant demand notes for the accepted part of the demand.
  - b. In case no response was made within 30 days, demand will be treated as accepted and interconnection seeker would be free to deposit the prescribed amount for the required number of ports.
  - c. The date of such deposit would be treated as the date of "firm demand".
  - d. Such **accepted demand shall be met within 6 months of such deposit.**
  - e. However, **in case of interconnection** with a minimum number of required E1 ports as ascertained by the interconnection provider, **required for the launch of the service, shall be provided within 90 days** of payment of the demand note, unless found to be technically non feasible.
5. Notwithstanding the above **when BSNL issued its RIO, it provided for a period of 12 months** for grant of POI's. However, **pursuant to the TDSAT judgment** in this regard, **BSNL did come out with a revised RIO for a very brief period in 2005** where it **reduced the said 12 months period to 6 months period** and further provided that **in case of launch of service, a period of 90 days** (for upto 1 E1 Ports.)
6. It may be noted that the **RIO issue was and continues to be a subject matter of litigation.** BSNL published a revised **RIO** in 2005 without seeking TRAI's approval. TRAI approached TDSAT in this matter **by way of a Review Petition** in TDSAT which was dismissed by TDSAT on **29.3.2006**. Thereafter BSNL has yet to come up with a formal RIO.
7. It may be appreciated that **timely grant of POI's / Interconnectivity goes to the very root of issues of quality of service.** TRAI has recognized that unavailability of Interconnection between networks of service providers' results in non-completion of calls, which causes disruption of service and inconvenience to the subscribers of the network of both the interconnecting operators, and deterioration in the Quality of Service provided by the service provider and is **against the interest of the consumers and service providers.**
8. It was **in light of the above concern that TRAI on 07.06.2005** under section 13 of the TRAI Act 1997, **issued a direction to all service providers to provide interconnection on the request of the interconnection seeker within 90 days** of the applicable payments made by the interconnect seeker. This **direction has already been challenged by BSNL**

in Appeal No. 9 of 2005 and **is pending consideration before TDSAT**. It is pertinent to mention here that one of the arguments of BSNL is that TRAI does not have any jurisdiction to override License agreements / Interconnection agreements a view that has been upheld by TDSAT in its earlier judgments.

9. It may also be pertinent to note that **here again TRAI has not clarified as to who the interconnect seeker should be.**

**Suggestions:**

- a. In this background it **may be advisable to clearly specify the maximum period i.e. 90 days for provision of interconnection by the Interconnection provider in the License itself.**
- b. This period should **commence from the date of request/applicable payments** having been made by the Interconnection Seeker.

**E. Intra Circle Carriage Charge**

1. In respect of calls handed over by Cellular operators to BSNL at Level II TAX, it has been very clearly prescribed and clarified by the TRAI that a carriage charge of only 20p/minute will be payable irrespective of distance. This charge was specified by TRAI in its IUC Regulation of 29.10.2003.
2. However despite this, BSNL was levying distance based charges for the above calls. The above inter alia was challenged by the CMSPs in TDSAT vide their Petition No. 48 of 2004.
3. TDSAT in its order and judgment dated 11.11.2005 upheld the view of the CMSPs and directed BSNL not to levy distance based carriage charges for such calls as they were entitled to levy a carriage charge of only 20p/minute for all such calls as per the said Regulation..
4. In response to the above direction /judgment of TDSAT, BSNL
  - a. Filed an appeal in the Supreme Court (being Appeal No. D5558 of 2006) against the order and judgment of TDSAT dated 11.11.2005.
  - b. Filed an Appeal in TDSAT (being Appeal No. 1 of 2006) in which it challenged clause 4 (iii), (iv) and para 84 of the Explanatory Memorandum of the IUC Regulation of 29<sup>th</sup>

October 2003, to the extent it seeks to take away the right of the BSNL to demand and recover "Carriage Charges" in accordance with the actual work done principle, i.e. on the basis of the distance and in accordance with the agreed terms and conditions of Interconnect Agreements between the BSNL and other private service operators.

5. It may be noted that while the BSNL appeal has been admitted in Supreme Court, the Hon'ble Court has not granted any stay in the matter. Despite the above BSNL continued to flout the judgment of TDSAT and levy distance based carriage charges.
6. The **IUC Regulation of 29.10.2003 was amended by TRAI on 23.2.2006** and vide its Letter No. 409-4/2006-FN dated **17.5.2006**, **TRAI reconfirmed that under the 29.10.2003 Regulation, a flat carriage charge of only 20p/minute was payable** for calls handed over by CMSPs at Level II TAX and further that that the **same also continues to be applicable** in the IUC Regime notified by TRAI vide its **IUC Regulation dated 23.2.2006**
7. **Instead of implementing the above, BSNL also challenged the TRAI letter of 17.5.2006** in TDSAT (being Appeal No. 8 of 2006) The **matter came up for issue of notice and for stay** of TRAI's letter dated 17.05.2006 before TDSAT **on 30.05.2006** when **TDSAT refused to grant a stay and directed BSNL to implement the carriage charge of 20p/minute within ten days** of its order dated 30.05.2006.
8. **Vide its Circular dated 9.6.2006 BSNL has complied** with the above directions of TDSAT **with effect from 1.3.2006.**
9. It may be noted that **BSNL in its Appeal** against the 29.10.2003 IUC Regulation has stated that the **carriage charges should be in accordance with the actual work done principle and in accordance with the Interconnect Agreements** that have been signed between BSNL and the private operators. Further, Clauses 6.4.1 and 6.4.2 of the said interconnect agreements provide inter alia that :
  - a. Access charges will be payable by CMSPs for calls terminating in the BSNL network
  - b. No access charges will be payable by BSNL for calls terminating in the CMSP network.
  - c. For calculating the access charges payable by CMSPs, the point at which the calls are delivered into the BSNL network will be treated as the originating point. The calls will be

measured from such point of origin to the destination SDCA as per the standard tariff of TRAI

10. **Repeated challenges** by BSNL of all of TRAI's directions etc on interconnection lead to **intense levels of litigation** on virtually all aspects of interconnection, **first in TDSAT and then in the Supreme Court**. This naturally leads to **extensive delays**, coupled with **adverse financial consequences** for the private sector.

**Suggestions:**

- a. To **address the disconnect between the Interconnect agreements and the Regulations** issued by TRAI, the **License must recognize and record the role of TRAI in fixing terms and conditions related to interconnection**.
- b. **While Operators may be given the freedom / flexibility to negotiate the terms and conditions of interconnection**, but it **must be provided that in the absence of agreement on the terms of interconnection between the two interconnecting parties, the directives, etc of the TRAI must prevail**.
- c. The license must be amended to incorporate a provision to this effect.

**F. Augmentation**

1. **As networks grow, there is a need for operators to continuously upgrade /augment** their capacity to deal with the increased traffic.
2. However the **manner in which these costs are to be shared between interconnecting operators is not settled**.
3. **Clause 17.11 of the Basic Service License** provides that **"The network resources including the cost of upgrading/modifying interconnecting networks to meet the service requirements of service will be provided by service provider seeking interconnection**. However mutually negotiated sharing arrangements for cost of upgrading/modifying interconnecting networks between the service providers shall be permitted"...".
4. **Clause 27.3 of the UAS License** states **"The network resources including the cost of upgrading/ modifying interconnecting networks to meet the service requirements of the**

Licensee **will be mutually negotiated** keeping in view the orders and regulations issued by TRAI from time to time.

5. **TRAI in its Model RIO had provided that each party should bear the incremental cost** incurred for additional ports required for meeting the Quality of Service standards relating to its out going traffic to the other party. However, the RIO was challenged by BSNL and TDSAT has held that the RIO of the SMP operator needs only to be 'based' on the Model RIO (refer to Section – above)
6. **BSNL wants the interconnection seeker to bear the cost** of up gradation/modifying the interconnecting networks.
7. **TDSAT in its judgment and order dated 27.04.2005** in Appeal no. 11 of 2002 – BSNL Vs. TRAI, **in the context of Basic Licence**, has held, inter alia, that **“In our view such costs have to be borne by interconnection seeker in line with the license terms...”**
8. However, **the issue of who is the interconnection seeker and who is the interconnection provider and for how long has still not been clearly laid down or settled by any authority.**
9. As a result of the above, **private operators continue to be pay for the costs of augmentation.** This is **especially unfair as the augmented capacity (POIs) is used for both way traffic.**
10. It may however be noted that **in its judgment dated 3.5.2005 in the case of direct connectivity, the TDSAT did accept the principle of sharing infrastructure costs** as it observed that
  - i. It is logical that the media / infrastructure created for interconnection entails some expenditure
  - ii. This should be shared between the two operators who by mutual agreement are going to have direct connectivity.

**Suggestions:**

- a. The **License agreement should clearly specify the period for which a licensee would be an Interconnection Seeker** and should stipulate that **after the expiry of the said period, the cost of augmentation should be equally shared** between the two

interconnecting parties.

- b. **In the event that it is decided that each party should bear the incremental cost** incurred for additional ports required (as suggested by TRAI in its RIO), then it would be **necessary to segregate the trunks for incoming and outgoing traffic** so that each operator pays for his own augmentation and usage.

**G. Principle of Reciprocity**

**G.I. Payment of Interest on Delayed Payments**

1. **Clause 26.3 of the UAS License** agreement provides that **Licensee will work out** suitable regular **interconnect billing arrangements** with other licensed service providers in the respective Interconnect Agreements with them.
2. The **Interconnect Agreements signed between the operators and BSNL** have **one sided provisions for payment of interest on delayed payments** (Clause 7.5) i.e. only the private operators are obliged to pay interest on delayed IUC payments and there is no similar reciprocal clause for BSNL to pay any such interest on its delayed payment.
3. This above one-sided provision was present in the Interconnect Agreements because in pre IUC Regime, only the private operators used to make payments to BSNL and no payments were to be made by BSNL to the private operators.
4. This **non reciprocity was challenged by CMSPs** in COAI & Ors. Vs BSNL & Ors. In Petition No. 48 of 2004. TDSAT vide its order dated 11.11.2005 directed that payment of interest on delayed payments should be on a reciprocal basis. **TDSAT accordingly directed both parties to enter into agreement regarding the rate of interest which will be applicable for both the parties on reciprocal basis.**
5. However, **despite the aforesaid order BSNL has not implemented reciprocity** in payment of interest.
6. Under these circumstances **CMSPs have been constrained to file an Application for Implementation** of the said TDSAT's order (being Application No.26 of 2006) which is pending consideration of TDSAT. **BSNL is contesting the same** by saying that since it has

offered RIO to CMSPs, which **CMSPs can accept and which RIO contains reciprocal provisions** for payment of interest, therefore it has already implemented the TDSAT's judgment.

7. It is however submitted that the said **directions of TDSAT to implement reciprocity** in interest were **not in any manner tied to acceptance** or otherwise **of any other document** or agreement of BSNL.

#### **G.II Bank Guarantees**

1. There are also **other non-reciprocal clauses in the Interconnect agreement** such as the clause related to **provision of Bank Guarantees by CMSPs to BSNL** (Clause 7.3.2 and 7.4) **to securitize the IUC payments** to be made to BSNL. However, **similar reciprocal bank guarantees are not given by BSNL** to the private operators creating a non level playing field between operators.
2. This again is because at the time that the Interconnect Agreements were signed the IUC regimes had not been introduced and only the private operators used to make payments to BSNL and, no payments were to be made by BSNL to the private operators.

#### **G.III. Charges for Collocated Equipment**

1. The **interconnecting link equipment is required to be installed in the premises of the Interconnection Provider and Interconnection Seeker.**
2. There is however a huge **inequity in the amounts charged by BSNL/MTNL for the equipment of the private operators that is collocated in its premises** and the **amounts paid /payable by BSNL to the private operators** for the link equipment that is collocated at the premises of the private operators. BSNL charges are around 7-8 times higher. (refer BSNL Circular Nos. 116-14/96-PHC(pt) dated 19.02.200; 103-2/2002 dated 27.09.2002 & No. 103-1/2006 dated 30.5.2006)
3. **It is incorrect and unfair to have different charges for the same service / facility.** The **charges should be the same for both the parties** and therefore in cases where similar space, power supply, air conditioning is utilized by CMSPs, BSNL should charge CMSPs same amount as BSNL pays to CMSPs for similar service / facility.

**Suggestions:**

- a. The **principle of reciprocity must be enunciated in the License Agreements** of the operators.
- b. As regards the **exact rate of interest, provision of bank guarantees** for IUC charges, **if at all required, charges for collocation**, etc, the **license agreement must provide that this may be as decided by the TRAI from time to time.**

**H. Disconnection**

**1. TRAI vide its Direction dated 31.12.2003 had**

- a. Observed that Disconnection of POIs is not desirable in view of inconvenience caused to subscribers and then provided that the matter should be resolved through mutual agreement.
- b. In case of failure in arriving at mutual agreement, the operator who wishes to disconnect the POIs should give a notice for disconnection of POIs with a suitable time period, not less than 10 days.
- c. A copy of the above notice same should also be given to TRAI.
- d. In case TRAI does not intervene within the stipulated time frame, the operator concerned can go ahead with the disconnection of POIs.
- e. Alternatively, the **interconnecting operator may approach TRAI with full information about the dispute for determination in the matter.**
- f. This **direction was challenged by BSNL** in Appeal No. 2 of 2004 - BSNL vs TRAI.
- g. **TDSAT in its order and judgment dated 21.04.2004**, held that **TDSAT alone is the sole judicial authority to decide disputes** and TRAI does not have dispute settlement powers.
- h. **TDSAT however upheld the 10 days period of notice** for disconnection of POIs (It may be noted that BSNL had submitted that it had no objection to the fixing of maximum period of 10 days)

**Suggestions:**

- a. **Thus at present as far as disconnection is concerned a minimum notice period of 10 days is agreeable to all concerned. This 10 days notice period may be provided in the License itself.**
- b. Furthermore, a **methodology may be clearly evolved** and laid down (maybe in the License itself) **whereby the disputing parties are able to settle the dispute** within the said 10 days so as to avoid disconnection and thereby avoid inconvenience to public.

**I. Near and Far-End Handover**

1. The **existing interconnect agreements** (Clause 2.13.4.2 (addenda) signed by the operators with BSNL **allow for handover at the farthest point i.e. the terminating SDCA**, but in case this far end handover is not feasible, BSNL accept such calls only at the near end i.e. at the originating LDCC TAX. No intermediate handover at any other point is permitted.
2. It may be appreciated that as of date, many operators do not have POIs at all the SDCAs as a result of which they are forced to handover the calls at the originating SDCA despite the fact that the private operators have the capability of carrying the call upto a certain point in their own network and then handing over the call to an SDCA close to the terminating SDCA.
3. The above clause/provision on the one hand results in
  - a. Overburdening of the BSNL network leading to congestion
  - b. Sub-optimal utilization of the private operator's own network and facilities.
  - c. Unnecessary transit charges having to be paid to BSNL which increase the cost of the service leading to a burden on consumers

**Suggestions:**

- a. To ensure optimal utilization of the private operator's networks, reduce congestion in the BSNL networks and to benefit consumers through lower tariffs it is desirable that handover be permitted at the 'farthest' end.

**J. Roaming**

1. **Roaming is a form of interconnectivity outside the licensee's service area.**
2. The facility of roaming is **as of now not regulated** and left to the operators to decide amongst themselves.
3. **Even though private operators have made huge inroads as far as coverage is concerned**, but there are **still areas yet to be covered by them**. **BSNL by virtue of its legacy fixed line network** has been **able to achieve a far wider footprint** and has its network in a many smaller cities and town and even in the rural and remote areas.
4. **As roaming is not mandated, BSNL has consciously chosen not to enter into bilateral agreements with the private operators.**
5. **Non availability of this facility can have serious adverse consequences** for consumers, as was witnessed at the time of the Tsunami, when subscribers on non-BSNL networks were not able to connect with their families in times of crisis.

**Suggestion:**

- a. **As roaming is a USP of mobility and availability of this facility is in the interest of consumers**, it may be considered whether roaming should be mandatory under license, on terms and conditions as laid down by TRAI.

**K. Carriage of Intra-Circle Traffic By NLDOs**

1. This is with reference to a **recent amendment to the License Agreement of National Long Distance Operators (NLDOs)**, whereunder Government has allowed the NLDOs to **carry and terminate the intra-circle calls with mutual agreement with originating service provider**.
2. However, despite the above amendment, **BSNL is not allowing the private NLDOs to terminate the intra-circle traffic on its network** and as a result of which, **Access Providers are not able to exercise the right to choose a private NLDO** to handover such intra circle traffic which is meant for termination on BSNL's network.

3. As a result of the above, **BSNL's networks are getting overburdened and congested** while the private operators' networks have surplus unused capacity.
4. Furthermore this also results in **higher costs/tariffs as BSNL effectively has created a monopoly for both carriage as well as access** to its own subscribers.
5. **Implementation of license amendment will result in**
  - a. **Reduced congestion** on BSNL networks
  - b. **Optimal utilization of private operator's networks**
  - c. **Increased competition** in the intra circle carriage segment **leading to lower tariffs** for users

**Suggestion:**

- a. The license already incorporates this provision.
- b. There is need now to ensure that the same is implemented expeditiously within a given time frame.

**RELEVANT CLAUSES OF THE LICENSE****26. Network Interconnection**

**26.1** **Interconnection between the networks** of different SERVICE PROVIDERs shall be as per National Standards of CCS No.7 issued from time to time by Telecom Engineering Centre (TEC) and also **subject to technical feasibility and technical integrity** of the Networks and shall be **within the overall framework of interconnection regulations issued by the TRAI from time to time**. However, if situation so arises, INTERCONNECTION with R2MF signaling may be permitted by LICENSOR.

**26.2** The **LICENSEE may enter into suitable arrangements** with other service providers to **negotiate Interconnection Agreements** whereby the interconnected networks will provide the following:

(a) To meet all reasonable demand for the transmission and reception of messages between the interconnected systems.

(b) To establish and maintain such one or more Points of Interconnect as are reasonably required and are of sufficient capacity and in sufficient numbers to enable transmission and reception of the messages by means of the Applicable Systems,

(c) To connect, and keep connected, to their Applicable Systems.

**26.3** The provision of any equipment and its installation for the purpose of Interconnection shall depend on the **mutual agreement of the concerned parties**.

**26.4** The Interconnection Tests for each and every interface with any Service provider **shall be carried out by mutual arrangement** between the LICENSEE and the other party involved. The Interconnection Tests schedule shall be mutually agreed. Adequate time, not less than 30 days, will be given by the LICENSEE for these tests. On successful completion of interconnection tests or on mutual agreement between service providers for rectification of deficiencies / deviations, if any, the LICENSEE can commence the SERVICE. In case of disagreement for rectification of deficiencies / deviations in conducted interconnection tests, prior approval of LICENSOR shall be required.

**26.5 It shall be mandatory for the LICENSEE to provide interconnection to all eligible Telecom Service Providers** as well as NLD Operators whereby the subscribers could have a free choice to make inter-circle/ international long distance calls through NLD/ ILD Operator. For international long distance call, the LICENSEE shall normally access International Long Distance Operator's network through National Long Distance Operator's network subject to fulfillment of any Guidelines/ Orders/ Directions/ Regulation issued from time to time by Licensor/ TRAI. The LICENSEE shall not refuse to interconnect with the International Long Distance Licensee directly in situations where ILD Gateway Switches/ Point of Presence (POP), and that of Access Provider's (GMSC/ Transit Switch) are located at the same station of Level -I TAX

**26.6 Direct interconnectivity** among all Telecom Service Providers in the licensed SERVICE AREA **is permitted**. LICENSEE shall interconnect with other Service Providers, subject to compliance of prevailing regulations, directions or determinations issued by TRAI. The interconnection shall have to be withdrawn in case of termination of the respective licensed networks of another Telecom service providers within one hour or within such time as directed by the LICENSOR in writing, after receiving intimation from the LICENSOR in this regard.

**26.7 Point of Inter-connection (POI)** between the networks **shall be governed by Guidelines/ Orders/ Directions/ Regulation issued from time to time by Licensor/ TRAI.**

26.8 LICENSEE will work out suitable regular interconnect billing arrangements with other licensed service providers in the respective Interconnect Agreements with them.

## **27 Interface**

**27.1** The LICENSEE shall operate and maintain the licensed Network conforming to Quality of Service standards to be mutually agreed in respect of Network- Network Interface subject to such other directions as LICENSOR or TRAI may give from time to time. Failure on part of LICENSEE or his franchisee to adhere to the QUALITY OF SERVICE stipulations by TRAI and network to network interface standards of TEC may be treated as breach of Licence terms. For the purpose of providing the SERVICE, the LICENSEE shall install his own equipment so as to be compatible with other service providers' equipment to which the LICENSEE's Applicable Systems are intended for interconnection. The LICENSEE shall be solely responsible for attending to claims and damages arising out of his operations.

**27.2** The charges for accessing other networks for inter-network calls shall be based on mutual agreements between the service providers conforming to the Orders/Regulations/Guidelines issued by the TRAI from time to time.

**27.3** The network resources including the cost of upgrading/ modifying interconnecting networks to meet the service requirements of the LICENSEE will be mutually negotiated keeping in view the orders and regulations issued by the TRAI from time to time.

**PROVISIONS OF THE TRAI ACT**

“11(1) Notwithstanding anything contained in the Indian Telegraph Act, 1885 (13 of 1885), the functions of the Authority shall be to-

(b) discharge the following functions namely:-

(ii) **notwithstanding anything contained in the terms and conditions of the licence granted before** the commencement of the Telecom Regulatory Authority of India (Amendment) Act, **2000**, to fix the terms and conditions of inter-connectivity between the service providers;”

(iii) ensure technical compatibility and effective inter-connection between different service providers;

(iv) regulate arrangements amongst service providers of sharing their revenue derived from providing telecommunication services”;

**RELEVANT EXTRACTS FROM TDSAT JUDGMENTS**

**RIO JUDGMENT DATED 27.04.2005 IN**

- Appeal No.11 of 2002 – BSNL vs. TRAI,
- Appeal No. 12 of 2002 – MTNL vs. TRAI
- Petition No. 25 of 2004 – COAI vs. BSNL

1. “.... we are inclined to assume that the RIO Regulations of 2002 need to be seen as an attempt by TRAI to facilitate effective interconnection between the service providers and in particular between a service provider having significant market power and the one seeking interconnection with the latter. The model RIO also gives the broad framework and the various points that need to be addressed for the purpose of securing a smooth and effective interconnection. In particular we find that the following stipulations in the Regulation need to be focused upon:

(i): “The RIO will stipulate the concerned service provider’s terms and conditions on which it will agree to interconnect its network with the network of any other service provider seeking interconnection.

(ii) “The RIO so published by the Service Provider shall form the basis for all interconnection Agreements to be executed hereafter”.

(iii) “Based on the model RIO, the Service Providers with Significant Market Power are required to submit their proposed RIO’s to the Authority for approval, which when approved by the Authority is to be published to form the basis for all interconnection agreements to be entered into by/and with the issuer”.

(iv)“ The RIO Regulation has annexed a model RIO based on which the Service Provider is to draft its own terms and conditions in the form of a Proposed RIO and submit the same to the Authority for its approval”.

(v) “As per the RIO Regulations, it is the Service Provider who has to fix the terms of its RIO and after approval publish the same. This is further evidenced by the fact that the Service Provider seeking interconnection need not accept the published RIO and may

negotiate with each other to alter, vary, amend and add terms and thereafter, enter into an Agreement, the terms of which could be substantially different from the 'Model' RIO".

(vi) "The power to fix terms and conditions of Inter-connectivity is not conferred by the said RIO Regulations as only the power to approve the terms and conditions laid down by the Service Provider in the Proposed RIO has been stipulated in the said RIO Regulations".

**There is no stipulation in the RIO Regulations to adopt the model RIO. All that the RIO Regulations require is that the Proposed RIO be based on the Model RIO. (Para 17)**

2. **"There can be no doubt that the attempt sought to be made by TRAI to facilitate interconnection making use of RIO regulations and the related "Model RIO" and the "Guidelines" would need to be in consonance with the conditions of the license given to the service providers and the powers available to TRAI under the Act in regard to interconnection. The RIO is basically an offer from the relevant service provider indicating its terms and conditions for the purpose of arriving at an agreement with any such service provider seeking the inter connection. The stipulation of prior approval of the Authority in clause 3.1 of the regulations would not give powers to TRAI to impose a set of new terms and conditions but would basically be to ensure that the basic structure of the model RIO is adhered to and the various points which have been identified in the draft RIO have been reasonably addressed. Any other intrusive approach in the garb of "prior approval" would not be in accordance with the provisions of the TRAI Act and would also undermine the freedom of a service provider to enter into mutual negotiations and agreement with other service providers in the matter of interconnection which has been referred to in the licenses and finds mention in the RIO regulation. The use of model RIO cannot usurp the right of the Service Provider to first enter into an arrangement or agreement in exercise of the freedom of contract envisaged in the license." (Para 18)**

3. The TDSAT had also **relied on the Delhi High Court judgment in MTNL Vs. TRAI** (AIR 2000 Delhi 208) and has further held, inter alia, that:

**"..When the Central Government puts the terms and conditions of interconnectivity in the license it is not for the TRAI to say that these conditions are of no use or suo motu vary or over ride them. There is nothing in the Act, after its amendment, which would take away the effect of the law, as laid down by the High Court in the case of MTNL. Principles**

laid down in that judgment are quite explicit. **TRAI is now empowered to fix the terms and conditions of interconnectivity** between the service providers to whom licenses have been issued prior to the amendment to the Act in 2000. **The extent to which this power can be exercised is to bring harmony** with the terms of interconnectivity of licenses issued after the amendment of 2000 so that it is in conformity with the TRAI Act and the principles laid down in the said judgment.

Statement of objects and reasons for the amendment do not take away the plain language of the enactment. When terms and conditions of the license use the terminology like orders/ decisions/ determination/ regulation that would not mean that TRAI can adopt any of the methods to rewrite or vary the terms and conditions of the license and these would need to be within the confines of the licensing framework and also be in conformity with the statute.

We cannot read in sub clauses (i) and (ii) of clause (a) of Section 11(1) that terms and conditions of the license would not include terms and conditions of interconnectivity between the service providers. TRAI would remain bound by the terms and conditions of interconnectivity of the service providers as given in the license issued after the amendment to the Act in 2000. It has power to change the terms and conditions of interconnectivity of the license issued prior to the amendment of 2000 to the extent that these are in conformity with the terms and conditions of interconnectivity contained in the license issued after the amendment of 2000. This to us appears to be the only harmonious construction to give effect to the provisions of sub-clause (ii) of clause (a) of Section 11 (1) and sub clause (ii) of clause (b) of Section 11(1) of the Act." **(Para 21)**

4. **TDSAT has quoted** the following para from the **High Court's judgment in MTNL case:**

"For all the above reasons, it would have to be held that the authority has no power to issue any regulation which in any manner converts the merely recommendatory or advisory function into a directory function. The directions and regulations which the authority may issue and/or frame must necessarily be within the framework of the said Act. **The authority has no power or function to change or vary rights of parties under contracts or licenses. It can only regulate within the terms and conditions of the license**" (Para 24)

5. "It is therefore **quite clear that the Hon'ble Division Bench has laid down that TRAI in the performance of its regulatory functions does not have the power to over ride the**

**license conditions or vary contracts** or existing private rights unless specifically empowered under the statute.” **(Para 25)**

6. "It is thus clear that **at several places** in the license **flexibility has been given to the Licensee to enter into mutually negotiated interconnection agreements**. In some of the clauses (clauses 17.2, 17.6 and 17.10) language used is “ shall be as per mutual agreement subject to compliance of prevailing determination/regulation/ direction issued by the TRAI under TRAI Act, 1997”. There is one clause namely 17.8, which needs to be particularly noticed in as much as it states that **“the Licensee shall comply with any order, direction, determination or regulation issued by TRAI** under TRAI Act 1997 as amended from time to time”. **If this clause were to be read as an over arching provision it does not make sense why in other clauses language to the effect “as per mutual agreement subject to compliance of prevailing orders, direction, determination or regulation issued by TRAI under the TRAI Act 1997” has been used**. Also in **many of the clauses the conditions have not been made “subject to TRAI determination** thereby **implying that these are terms set by the Licensor which cannot be altered** without the consent/determination of the Licensor”. **(Para 27)**
  
7. “A harmonious way of interpreting the various clauses under the heading of ‘Network Interconnection’ would be to see the differentiation in as much as some of the clauses merely stipulate the terms set by the Licensor, another set of clauses allows the Licensee to interconnect on mutually negotiated terms, yet another set of clauses provides that the mutual negotiated arrangements would be subject to compliance of any determination, orders, directions and regulations issued from time to time by TRAI and finally there is a set of clauses which prescribe the standards of interfacing, the interconnection routing for NLD, INLD and intra circle long distance traffic and standards for quality of services. **There is no doubt that importance has been given to mutual negotiations** in settling the terms between the service providers in regard to different aspects of interconnection. **The reasons could be that in interconnection matters, mutuality of interest is sought to be given incentive and in some specified matters the mutually negotiated arrangements need to be in compliance with orders / directions / regulations of TRAI.**” **(Para 28)**
  
8. There is, therefore, considerable difference in the stipulations in regard to the powers of TRAI in the license in regard to “tariffs” and those relating to “Network interconnection”. We do not see any merit in the argument that the conclusions reached by the Division Bench would not be applicable to the situation existing after the Amendment to the TRAI Act in

2000. On the other hand, we are more convinced than ever that the principles laid down in this judgment are extremely relevant and provide valuable guidance for deciding the contentious matters presently before us." **(Para 29)**

9. We **continue to hold that the RIO Regulations need to be in accordance with the TRAI Act, the licensing conditions and directions and rules** by the Central Government under Sections 25 & 35 of the TRAI Act. A **harmonious interpretation** would need to be made of the provisions in the regulations **to see that these do not violate the TRAI Act**. We have proceeded to deal with this matter keeping this in view. **(Para 32)**

10. **As regards the stipulation of "prior approval" by TRAI**, we have already indicated elsewhere that **'prior approval would only mean that the proposed RIO is in accordance with the law and licensing conditions**. Specifically we have concluded that:

"The stipulation of prior approval of the Authority in clause 3.1 would not give powers to TRAI to impose a set of new terms and conditions but would basically be to ensure that the basic structure of the model RIO is adhered to and the various points which have been identified in the draft RIO have been reasonably addressed. Any other intrusive approach in the garb of "prior approval" would not be in accordance with the provisions of the TRAI Act and would also undermine the freedom of a service provider to enter into mutual negotiations and agreement with other service providers in the matter of interconnection which has been referred to in the licenses and finds mention in the RIO regulation." **(Para 34)**

11. **"Cost of augmentation and cost of Interconnection** (Reference - clauses 3.4.2 and 12.3 of draft RIO): **BSNL wants the interconnection seeker to bear the cost of up gradation/modifying** the interconnecting networks i.e. the charges for augmentation required on account of providing interconnection and for additional capacity based on traffic observations so as to compensate BSNL for investments (not covered by existing interconnection charges regime) to be made for establishing new infrastructure including down stream network elements to handle additional traffic.

**TRAI wants each party to bear the incremental cost incurred for additional ports** required for meeting the Quality of Service standards relating to its out going traffic to the other party.

**In our view such costs have to be borne by interconnection seeker in line with the license terms.** For example, in clause 17.11 of the License agreement relating to Basic Telecom Service stipulates as under:

“17.11 The network resources including the cost of upgrading/modifying interconnecting networks to meet the service requirements of service will be provided by service provider seeking interconnection. However mutually negotiated sharing arrangements for cost of upgrading/modifying interconnecting networks between the service providers shall be permitted”. **(Para 36(3))**

**12. In our view the purpose of any RIO is only to serve as a benchmark for mutual negotiations** between the two operators resulting into the ultimate signing of the interconnect agreement. The **basic aim is to: (i) increase transparency; (ii) shorten / expedite commercial negotiations** for signing the interconnect agreements; (iii) **provide more certainty to new entrants** to the market; and (iv) **prevent unfair discrimination** so as to accelerate development of telecom infrastructure in the larger interest of the public and healthy competition in the telecom sector. We have also held that the **freedom of service provider to enter into mutual negotiations and agreements** with other service providers in the matter of interconnection **has to be given due recognition and should not be undermined.** **(Para 39)**

## **DIRECT CONNECTIVITY JUDGMENT DATED 03.05.2005**

- Appeal No.31 of 2003 - BSNL Vs TRAI
- Petition No.20 of 2004 - COAI & Ors vs. BSNL & Ors.

1. "Therefore, the technological requirement of Direct Connectivity between the MSCs of CMSPs and the MSCs of BSNL Cell One needs to be addressed in a comprehensive manner.

It is **logical that the media use/infrastructure created for interconnection** in accordance with the IUC Regulation of Interconnection **entail some expenditure**. This **should be shared between the two operators** who by mutual agreement are going to have direct connectivity. We do not want to give any directions on the interconnection which has already been created between the operators, which have been arrived at by signing MOUs / agreements between them. Wherever, till the date of this order, infrastructure has been created for connections from the Cellular Operators to Level-1 TAX the same will be used for the termination of calls to the PSTN subscribers as well as to CellOne subscribers. In the near future since both the CMSPs and BSNL CellOne are likely to enhance their capacities manifold, the present connectivity will fall short of the requirements. **In the interest of level playing field, direct connectivity between the CMSPs and the BSNL CellOne may be encouraged in the future by mutual agreement on the basis of costs being shared between the CMSP and BSNL CellOne".** (Para 17 (b))

2. "...till such time the matter is comprehensively dealt with by TRAI and final decision is taken thereon by the licensor, direct **connectivity should remain permissible**". (Para 17(c))
3. "Seeker/Provider Concept: This issue was discussed at length by both the parties. All the MSC's of cellular operators are connected to Level-1 TAX of BSNL for their calls to PSTN subscribers. This gives the facility to cellular mobile subscribers to transit calls through the Level-1 TAX to BSNL CellOne subscribers and also PSTN subscribers of Basic Service Networks including BSNL. Infrastructure was created by BSNL to support the other cellular networks for their transit calls and terminating calls on PSTN. BSNL entered into cellular operations through their CellOne at a later date. BSNL CellOne has however utilized the connectivity of BSNL PSTN with the other cellular operators for getting connected to their networks and thereby the related cellular subscribers.

BSNL charges Rs.0.19 per minute from the cellular subscribers for transiting calls through its Level-1 TAX. While this may be justified for providing terminations to these calls to the

BSNL PSTN network or for providing connectivity to the networks of other operators, it is also being charged for accessing BSNL CellOne subscribers. The cellular operators have paid port charges to BSNL for the Level-1 TAX connectivity. On the other hand BSNL CellOne is getting the benefits of connectivity to the other cellular operators without paying the PSTN transit charges and makes use of existing ports meant for such cellular operators for getting the PSTN transit connectivity for their traffic. **On considerations of level playing field it appears that BSNL is not justified any longer in charging transit charges** to the extent of 19 paise for accessing BSNL CellOne subscribers". **(Para 17(d))**

## PULSE JUDGMENT DATED 11.11.2005

- Petition No. 48 of 2004

1. “...**On the issue of distance based Carriage Charges** we notice that the petitioners are obliged to pay carriage charges to the respondents for handing over intra-circle calls at Level-II TAX in the terminating LDCAs. The IUC Regulations of October 2003 lay down applicability of these charges at Table-II in Schedule-II. Para 84 of the Explanatory Memorandum of the IUC Regulation of October lays down the carriage charge of only Re. 0.20 per minute for intra-circle calls irrespective of the distance from Level-II TAX to the Terminating Tandem / Local Exchange. We, however, find that **BSNL is charging additional amount based on the distance based charges, which is not in accordance with the stipulation of Table-II. The arguments based on the principle of work done are not of much merit in view of the clear stipulations** in IUC Regulation of October 2003, which are not under challenge by BSNL. TRAI has also clearly clarified to BSNL in this regard vide its Letter No. 409-16/2003-FN dated 20.1.2004 in the following terms:

“(c) In Schedule C of the BSNL’s letter, BSNL has specified distance based carriage charges for call terminating in their Fixed Line Network handed over at Level-II TX. Further for calls handed over at Tandem in a Metro BSNL is charging Re. 0.20 additionally as TAX charges. The IUC Regulation in Table-II has prescribed Nil carriage charge in the case of Cellular Metro Circles where the call is handed over at Tandem. Similarly in the case of Intra-Circle call from Cellular Network handed over to BSNL at the TAX in which the call is to be terminated a carriage charge of only 0.20 paise per minute would be applicable irrespective of the distance from that TAX to the terminating Tandem. In case call is handed over at any other TAX the relevant distance based carriage charge would be applicable.” **(Para 49)**

2. “We feel that the **distance based carriage resorted to by BSNL needs to be brought in tune immediately with what is authorized** as per the Regulation of October 2003 as stated in Table-II and therefore we allow the prayers to this effect and **direct BSNL not to levy the distance based carriage** of Re. 0.65, Re. 0.90 and Rs. 1.10 for the distance slabs of 50 to 200 kms, 200 to 500 kms and above 500 kms, respectively in case of Intra-Circle call from Cellular Network handed over to BSNL at the Terminating LDCA TAX in which the call is to be terminated, **as they are entitled to levy a carriage of only Re. 0.20 per minute for all such calls as per the said Regulation...**” **(Para 50)**

3. "Reciprocity in Interest The petitioners have pointed out that large amounts of bills are not paid in time by the respondents and when paid after considerable delay there is no payment of interest whereas an interest of 24% per annum compounded quarterly is charged from them on their dues. **We direct that this should be on reciprocal basis. Both parties are directed to enter into agreement regarding the rate of interest which will be applicable for both the parties on reciprocal basis". (Para 52(c))**

<b>International Practices on Cellular Rollout Obligations &amp; Coverage Criteria</b>					
S.No	Country	2G / 3G Licences	Roll-out Obligations Criteria	In-Building Coverage stipulated ( Yes/ No)	General Comments / Remarks
<b>Asia Pacific Countries</b>					
1	Pakistan	2G Licence	The new cellular Licences issued last year requires the licensees to provide: 1. Coverage within 70% Tehsil headquarters in 4 years. 2. Coverage has to be minimum 10% of Tehsil headquarters in each province.	No	Pakistan regulator has not laid down any benchmark in the licence template regarding street coverage & in-building coverage.
2	Malaysia	2G Licence	Nothing has been stipulated	No	No stipulation has been mentioned based on geographic, coverage or population basis
3	Thailand	2G Licence	There is no such requirement in terms of coverage percentage for operators in Thailand.	No	Each Operator will design detailed coverage based on its own marketing strategy.
<b>Middle Eastern Countries</b>					
4	Bahrain	2G Licence	Must achieve coverage of not less than 95% of population in licenced area by 31/12/2003	No	Roll out obligation is based on the criteria of population in the licenced area.
5	Israel	2G Licence	The licence covers coverage of 99% of the population	No	The licence terms do not refer to the geographic/ in building coverage
<b>African Countries</b>					
6	Nigeria	2G Licence	Obligation to built network capacity to support 100,000 users by end of year 1, expanding to 750,000 users by year 3	No	Roll out obligation is based on the criteria of population in the licenced area.

7	South Africa	2G Licence	1. Roll-out requirements of 8% geographical coverage & 60 % population coverage within five years & 2. 52000 community telephones in under-served areas within seven years	No	For Roll-out obligation, both geographical & population coverage are taken into consideration
<b>Europe Over View:</b>		<p>1. Nearly all European Member States included Roll-out/Coverage conditions in the license contract. This is valid for 2G and 3G licenses. <b>They are generally related to population coverage</b> (Sweden is an exception, they require also area coverage up to more than 90% for the whole country – therefore the operators deployed a new infrastructure sharing model).</p> <p>2. The general criterion for the Roll-out <b>obligations in European countries is to reach 25 – 50% population coverage within 2-3 years from the date of the licence</b>. In Europe the majority of the Member States have 25-30% pop coverage written in the licenses.</p> <p>3. <b>In-building coverage was never a roll-out/coverage requirement. The regulators always left it on the market to decide. This is also still the case today.</b></p> <p>4. In-building coverage is generally an outdoor - to – indoor Base Station transmit case. Practically seen, indoor BS-sites are not deployed in Europe, except in Exhibition Halls for Conferences and fairs, this means always a deployment for special cases (radio plannings specifically for the events) where the regulator is involved, but more from the technical side (e.g. maximum field strength etc.).</p>			
8	Austria	3G Licence	1. 25% of the population by the end of 2003 2. 50% by the end of 2005	No	The 3G licence was awarded in March 2001
9	Belgium	3G Licence	All deadlines have been postponed. New deadlines are as follows:- 30% of population by Jan. 1, 2006;- 40% by Jan. 1, 2007;- 50% by Jan. 1, 2008;- 85% by March 13, 2009. The last step (85%) can be revised by Royal Decree.	No	The 3G licence was awarded in March 2001
10	Bosnia & Herzegovina	2G Licence	Full provision of licenced GSM service to be ensured to: a. 80% of the population of Bosnia & Herzegovina	No	
11	Denmark	3G Licence	1. 30% of population by end of 2004 2. 80% by end of 2008	No	The 3G licence was awarded in September 2001

12	Finland	3G Licence	<p>1. No specific coverage requirements in original 3G licences.</p> <p>2. On April 15, 2004 the government decided to ease the terms of 3G licences in mainland Finland. Licensees are allowed to construct a part of the networks together.</p> <p>3. However, each licensee's own network must provide 35% of the population coverage ('own coverage area').</p> <p>4. The ministry will assess the network roll out in 2005 based on the reports submitted by the licensees. (No results published by Aug. 2005).</p>	No	
13	France	3G Licence	<p>1. Voice: 25% &gt; 2 years , &amp; 80% &gt; 8 years</p> <p>2. Data: 20% &gt; 2 years, 60% &gt; 8 years ( % of population coverage only)</p>	No	The 3G licence was awarded in May 2001
14	Germany	3G Licence	<p>1. 25% by end 2003</p> <p>2. 50% by end 2005 ( % of population coverage only)</p>	No	The 3G licence was awarded in August 2000
15	Greece	3G Licence	<p>1. 25% by end 2003</p> <p>2. 50% by end 2006</p> <p>3. There is no specific requirements in relation to in-building coverage. ( % of population coverage only)</p>	No	<p>1. The 3G licence was awarded in July 2000</p> <p>2. Greece's licence requires 95% population coverage and 70% geographical coverage.</p> <p>3. In case of geographical coverage in Greece, it is applicable only to street coverage.</p>
16	Ireland	3G Licence	<p>1. 53% by Aug31, 2005</p> <p>2. 80% by Dec, 31, 2007 ( % of population coverage only)</p>	No	The 3G licence was awarded in June 2001
17	Italy	3G Licence	<p>1, Coverage of regional capitals by June 30, 2004</p> <p>2. Provincial Coverage by Dec 31, 2006</p>	No	The 3G auction rules state that coverage is defined as 95% of population and 30% of geographic area of each regional/provincial capital
18	Netherlands	3G Licence	<p>1. By Jan. 1, 2007 coverage of:- all cities with more than 25K inhabitants;- all main routes (roads, railways and waterways) between these cities, motorways to Germany and Belgium and around major airports (Schiphol, Maastricht, Rotterdam).</p>	No	The 3G licence was awarded in August 2000

19	Luxembourg	3G Licence	<p>1. No coverage obligation imposed by the State but the commitments made by the applicants during the beauty contest were incorporated in their licences</p> <p>2. Individual commitments are not available yet but the ranges are:-  between 15% and 92% of the territory and between 60% and 97% of the population by 2004; and  between 64% and 98% of the territory and between 95% and 98% of the population by 2010.</p>	No	The 3G licence was awarded in May 2002
20	Norway	3G Licence	<p>Depends on the commitments made by the operators. <b>Telenor Mobil-</b></p> <p>1. During first year (by Nov. 30, 2001): 10% of population in the 12 biggest towns in terms of population.-</p> <p>2. During first three years (by Nov. 30, 2003): 90% of population in each town with more than 2,800 inhabitants. In addition, coverage of areas outside these towns so that the total population covered is 2.8m.-</p> <p>3. During first five years (by Nov. 2005): 90% of population in each town with more than 200 inhabitants. In addition, coverage outside towns so that the total population covered is 3.75m (the total population of Norway is 4.3m).</p>	No	Licence Awarded in Nov 2000
	Norway	3G Licence	<p><b>NetCom-</b></p> <p>1. During first year (by Nov. 30, 2001): 90% of population of the 12 biggest towns (in terms of population).-</p> <p>2. During the second year (by Nov. 30, 2002): 75.7% of total population.-</p> <p>3. During the third year (by Nov. 30, 2003): 76.5% of total population.</p>	No	Licence Awarded in Nov 2000
21	Portugal	3G Licence	<p>1. Deadlines have been postponed.</p> <p>2. The starting date was the date of issue of the licence and is now the commercial launch date. -</p> <p>a. 20% of population after 1 year from commercial launch;-</p> <p>b. 40% after 3 years from commercial launch;-</p> <p>c. 60% after 5 years from commercial launch</p>	No	The 3G licence was awarded in November 2000

22	Spain	3G Licence	operators' licences in June 2004 (see Big Five Update No 49).For Telefónica Móviles and Vodafone, the target is coverage of 95% of the population by 2009 (five years after commercial launch). For Amena and Xfera, the 95% coverage deadline has also been extended to five years after commercial launch. (Only Xfera has not started to provide UMTS commercial services).	No	The 3g Licence was awarded in Dec 2000
23	Switzerland	3G Licence	50% by 2004 ( % of population coverage only)	No	The 3G licence was awarded in Decr 2000
24	UK	3G Licence	80% by end 2007 ( % of population coverage only)	No	The 3G licence was awarded in January 2001
25	Cyprus		Minimum geographical coverage of 50% within two years and 75% within 4 years	No	Roll out obligation is based on the criteria of geographical coverage
26	Sweden	3G Licence	1. D25Full coverage (8.86m people) by the end of 2003 following the commitments made by operators. 2. On June 28, 2004 TeliaSonera, Tele2, Hi3G, and Vodafone lodged a joint application to PTS for altered 3G coverage requirements:- An amended timetable for network construction, i.e. coverage of at least 7m people by Dec. 31, 2004; 8m by Dec. 31, 2005; 8.5m by Dec. 31, 2006 and 8.86m by Dec. 31, 2007.	No	The 3G licence was awarded in December 2000

**Sources:** *Pakistan Telecommunications Authority , Mobilink Pakistan, GSM Association , Mr. Joseph Huber, UMTS Forum / Siemens  
M/s Cosmot ( Greece Cellular Service Provider), M/s Orange, (Israel Cellular Service Provider)  
M/s Hutch ( Thailand Cellular Service Provider ), M/s Maxis (Malaysia Cellular Service Provider)*

**SUGGESTED LICENSE AMENDMENTS WITH REGARD TO PROVISION OF INTERCONNECTION**

Clause No.	Provision (with suggested amendments in trackchange)	Comments / Justification
26. 26.1	<p><b>Network Interconnection.</b></p> <p>Interconnection between the networks of different SERVICE PROVIDERS shall be as per National Standards of CCS No.7 issued from time to time by Telecom Engineering Centre (TEC) and also subject to technical feasibility and technical integrity of the Networks and shall be within the overall framework of interconnection regulations, <u>Decisions, Orders and Guidelines</u> issued by the TRAI from time to time. However, if situation so arises, INTERCONNECTION with R2MF signaling may be permitted by LICENSOR.</p>	
26.2	<p><u>I. The LICENSEE shall enter into suitable arrangements with other service providers to negotiate Interconnection Agreements whereby the interconnected networks will provide the following:</u></p> <p>(a) To meet all reasonable demand for the transmission and reception of messages between the interconnected systems.</p> <p>(b) To establish and maintain such one or more Points of Interconnect, as are reasonably required and are of sufficient capacity and in sufficient numbers to enable transmission and reception of the messages by means of the Applicable Systems,</p> <p>(c) To connect, and keep connected, to their Applicable Systems.</p> <p>II. <u>All such interconnections, shall be provided:</u></p> <p><u>a. under non-discriminatory terms, conditions (including technical standards and specifications) and rates and of a quality no less favourable than that provided for its own like</u></p>	<p>These fundamental principles of interconnection are in line with the framework laid down by WTO and GATT</p>

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	<p><u>services or for like services of non-affiliated service suppliers or for its own subsidiaries or other affiliates;</u></p> <p><u>b. in a timely fashion, on terms, conditions (including technical standards and specifications) and cost-oriented rates, that are transparent, reasonable, having regard to economic feasibility, and sufficiently unbundled so that the supplier need not pay for network components or facilities that it does not require for the service to be provided; and</u></p> <p><u>c. upon request, at points, in addition to the network termination points, offered to the majority of users, subject to charges that reflect the cost of construction of additional facilities.</u></p> <p><u>III. For the purposes of this License as also Interconnection Agreements between service providers;</u></p> <p><u>a. Interconnection seeker shall mean a later entrant (based on effective date of license) into the respective service segment for which Interconnection is being sought and the Interconnection Provider shall mean the existing operator who is providing the interconnection.</u></p> <p><u>b. The cost of network resources including the cost of upgrading/ modifying interconnecting networks to meet the service requirements of the LICENSEE will be paid for by the service provider seeking interconnection for a period of 2 years from the date when interconnection was first sought from the Interconnection Provider.</u></p> <p><u>c. After the expiry of the above said period of 2 years each Service Providers shall bear the incremental cost of Augmentation incurred to meet the requirement of their outgoing traffic as also the quality of service standards laid down by TRAI.</u></p> <p><u>d. With respect to existing Points of Interconnection where the</u></p>	<p>As networks grow, there is a need for operators to continuously upgrade /augment their capacity to deal with the increased traffic. However while existing provisions of license talk about mutual negotiations for sharing the costs of augmentation, the reality of the matter is that in the case of asymmetric market power the SMP operator is able to dictate terms and make the other service provider continue to pay for augmentation of interconnection. This is the reason why private operators bear their own costs for augmentation, In the case of incumbent SMP, the private operators continue to pay for ports and leased circuits even after a period of 11 years.</p>
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	<p><u>period of 2 years has already expired from the date of establishment of the interconnection both the Service Providers shall bear the cost of Augmentation to meet the requirement of their outgoing traffic</u></p>	<p>It is therefore important to define the period for which a licensee would be an interconnection seeker and also clearly lay down that after the expiry of the said period, the costs for interconnection would be shared between the interconnecting operator.</p> <p>The period of 2 years has been taken from the TRAI's RIO guidelines of 12 July 2002 which state that "Two years after the initial interconnection is established, the issue as to who bears the cost of additional resources required shall be negotiated between the service providers. The general principle followed in these negotiations is that each party should bear the incremental costs incurred for the additional ports required for meeting the QOS standards relating to its outgoing traffic to the other Party."</p>
26.2 (A)	<p><u>All Interconnection / Points of Interconnect (POI's) shall be provided/augmented by the Interconnection Provider within a period of 60 days from the date of the Interconnection Seeker applying for the POI/augmentation. In case of inability of Interconnection Provider to provide the POI/augmentation within the said period of 60 days for reasons of it not being technically feasible, the Interconnection Provider shall approach TRAI for extension of time at least 30 days before the expiry of the said 60 days period, with details of the reasons for such inability. The TRAI may in its sole discretion either grant or reject such request and if granted, TRAI may grant the same for such reasonable period as the facts of each case may demand.</u></p>	<p>Timely provision of interconnection / augmentation is a key requirement under WTO and is also important to ensure sustained growth as well as quality of service.</p> <p>At present the delays in the provision of interconnection occur both in the issue of the demand note and also in the provision of the E1 ports.</p> <p>The Hon'ble MoC in the recent India Telecom Summit in December 2006 announced that interconnection would be provided within 30 days of all applicable payments being made.</p> <p>In addition the interconnection agreements signed by the operators already provide that the intimation of the acceptance of the application will be given within a period of 30 days of the application being made and if no intimation is received within 30 days, the same should be treated as accepted. However this provision is not being</p>

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		<p>complied with. Inclusion of this as a license term will give TRAI enforcement powers in this regard and will ensure timely provision of interconnection facilities.</p> <p>The provision of 60 days from date of application will cover both the above requirements.</p>
26.3	The provision of any equipment and its installation for the purpose of Interconnection shall depend on the mutual agreement of the concerned parties.	
26.4	The Interconnection Tests <u>subject to orders/regulations/direction of TRAI/Licensor</u> , for each and every interface with any Service provider shall be carried out by mutual arrangement between the LICENSEE and the other party involved. The Interconnection Tests schedule shall be mutually agreed. Adequate time, not less than 30 days, will be given by the LICENSEE for these tests. On successful completion of interconnection tests or on mutual agreement between service providers for rectification of deficiencies / deviations, if any, the LICENSEE can commence the SERVICE. In case of disagreement for rectification of deficiencies / deviations in conducted interconnection tests, prior approval of LICENSOR shall be required.	
26.5	It shall be mandatory for the LICENSEE to provide interconnection to all eligible Telecom Service Providers as well as NLD Operators whereby the subscribers could have a free choice to make inter-circle/ international long distance calls through <u>any</u> NLD/ ILD Operator. For international long distance call, the LICENSEE shall normally access International Long Distance Operator's network through National Long Distance Operator's network subject to fulfillment of any Guidelines/ Orders/ Directions/ Regulation issued from time to time by Licensor/ TRAI. The LICENSEE shall not refuse to interconnect with the International Long Distance Licensee directly in situations where ILD Gateway Switches/ Point of Presence (POP), and that of Access Provider's (GMSC/ Transit Switch) are	

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	located at the same station of Level -I TAX . <u>The Licencee shall be entitled to choose between Private NLDO's or Public sector NLDO's for terminating their Intra-circle traffic on the terminating Access Providers Network.</u>	<p>This amendment will bring competition into the intra circle long distance segment.</p> <p>At present the incumbent SMP is in a monopoly position for terminating calls on its network at the SDCA level and is thus able to charge a premium for this service.</p> <p>Private NLDOs who also have POIs at the SDC level should be allowed to take intra circle Cell to PSTN calls and carry them to the SDCA for handover to BSNL.</p> <p>Introduction of competition in this segment will reduce the charges for this leg which will be in consumer interest.</p>
26.6	Direct interconnectivity among all Telecom Service Providers in the licensed SERVICE AREA <u>shall be mandatory except in exceptional circumstances where both parties mutually feel that such direct connectivity is not warranted.</u> LICENSEE shall interconnect with other Service Providers, subject to compliance of prevailing regulations, directions or determinations issued by TRAI. The interconnection shall have to be withdrawn in case of termination of the respective licensed networks of another Telecom service providers within one hour or within such time as directed by the LICENSOR in writing, after receiving intimation from the LICENSOR in this regard.	<p>This provision is desirable in consumer interest.</p> <p>In the present case where direct connectivity is only 'permissible' it is used as a way to delay or deny direct connectivity. There have been instances where operators have been made to sign one-sided addenda to their interconnect agreements with the incumbent SMP operator in order to establish direct connectivity.</p> <p>The caveat "except in exceptional circumstances" is necessary because there may be cases where the costs entailed in establishing direct connectivity are not justified by the traffic patterns at the initial stage of the launch of the service. But it is important to note that both parties must agree that direct connectivity is not warranted.</p>
26.7	Point of Inter-connection (POI) between the networks shall be governed by Guidelines/ Orders/ Directions/ Regulation issued from time to time by Licensor/ TRAI.	
26.8	LICENSEE will work out suitable regular interconnect billing	

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	arrangements with other licensed service providers in the respective Interconnect Agreements with them. <u>Interconnect billing arrangements between networks shall be governed by Guidelines/Orders/Directions/Regulations issued from time to time by licensor/TRAI.</u>	
<u>26.9</u>	1. <u>Notwithstanding anything contained in this Licence or in any Interconnect Agreement between Service Providers each and all mutually negotiated terms of Interconnection shall be subject to and within the overall parameters of the Interconnect Regulations / Directions / Decisions/ Orders/Guidelines of TRAI and in case of conflict between the two the TRAI's Regulations / Directions / Decisions/Guidelines shall prevail.</u>	<p>While on one hand interconnection has been made mandatory for the Licensees, various provisions of the License Agreement refer both i.e. to the service provider mutually negotiating the terms of interconnectivity and also to the connectivity being within the overall framework of interconnection regulations issued by the TRAI from time to time and compliance with the TRAI's Regulations.</p> <p>Please refer to highlighted portions of Clauses 26.1; 26.2; 26.3; 26.4; 26.5; 26.6; 26.7; 27.1; 27.2 &amp; 27.3</p> <p>This reference to both mutual agreement and compliance with TRAI's Regulations has given rise to interpretative controversies and disputes</p> <p>Introduction of Clause 26.9 will provide clarity in respect of interconnection,</p>
<u>26.10</u>	<p>1. <u>A Service Provider with significant market power shall be required to publish, within 90 days of this amendment, a Reference Interconnect Offer (RIO) describing, inter-alia, the technical and commercial conditions for interconnection based on the model RIO and guidelines issued by TRAI and as modified by TRAI from time to time, with the prior written approval of TRAI, including amendments thereto. The RIO so published by the Service Provider shall form the basis for all Interconnection Agreements to be executed hereafter.</u></p> <p>2. <u>The existing Interconnect Agreements shall stand modified to fall in line with the model RIO approved by the TRAI.</u></p>	<p>It must be appreciated that it is very difficult for individual private operators to negotiate with the incumbent operators like MTNL / BSNL. Thus while in theory the emphasis is on mutual negotiations, in actual fact, this results in a unilateral prescription of terms and conditions on a take it or leave it basis by incumbent SMP operator.</p> <p>It is thus very important for new /small operators to be assured of interconnection on the basic terms &amp; conditions as laid down / approved by the TRAI.</p> <p>Thus while parties may negotiate to better the terms of</p>

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	<p>3. <u>A published RIO may be changed only with the prior written approval of TRAI. Interconnection Agreements are required to be entered into by and between all Service Providers based on the RIOs so published, provided, however, that by mutual agreement the two parties concerned i.e. the Interconnection Provider and the Interconnection Seeker may modify and/or add to the terms and conditions stipulated in the published RIO for entering into an Individualised Agreement. However, if the parties fail to agree to mutually acceptable terms within a period of 90 days from the commencement of the process of negotiation, the so published RIO shall be deemed to have been executed as the Interconnect Agreement between the parties.</u></p> <p>4. <u>A Service Provider shall be deemed to have significant market power if it holds a share of 30% of total activity in a licensed telecommunication service area. These Services are categorized as Basic Service, Cellular Mobile Service, National Long Distance Service and International Long Distance Service.</u></p> <p><u>"Activity" would mean and include any one or more of the following:</u></p> <p>(a) _____ Subscriber _____ base  (b) _____ Turnover  (c) _____ Switching _____ Capacity  (d) Volume of Traffic</p>	<p>interconnection, the RIO as approved by TRAI should form the basic minimum interconnection terms &amp; conditions guaranteed to an operator</p> <p>This is the standard definition adopted for SMP</p>
<p><u>26.11</u></p>	<p><u>Subject to TRAI's Regulations / Directions / Decisions/ Orders/Guidelines, all Interconnection charges including but not limited to Interest on delayed payments, provision and amounts of Bank Guarantees, charges for Co locating equipment, etc. shall be on Reciprocal basis.</u></p>	<p>The principles of reciprocity have been repeatedly upheld by the Hon'ble TDSAT.</p> <p>However, this principle is still not being followed by incumbent SMP operator and private operators are often constrained to enter into one sided agreements in order to ensure interconnection /augmentation.</p> <p>Introduction of this provision in the license will give TRAI</p>

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		enforcement powers and will ensure equitable treatment and level playing field.
<u>26.12</u>	<u>No Service Provider shall disconnect one or more Points of Interconnect without providing a prior written notice of at least 21 working days, during which period the concerned Service Providers shall make all attempts to mutually settle the dispute.</u>	
<b>27</b>	<b><u>Interface</u></b>	
27.1	The LICENSEE shall operate and maintain the licensed Network conforming to Quality of Service standards to be mutually agreed in respect of Network- Network Interface subject to such other directions as LICENSOR or TRAI may give from time to time. Failure on part of LICENSEE or his franchisee to adhere to the QUALITY OF SERVICE stipulations by TRAI and network to network interface standards of TEC may be treated as breach of Licence terms. For the purpose of providing the SERVICE, the LICENSEE shall install his own equipment so as to be compatible with other service providers' equipment to which the LICENSEE's Applicable Systems are intended for interconnection. The LICENSEE shall be solely responsible for attending to claims and damages arising out of his operations.	
27.2	The charges for accessing other networks for inter-network calls shall be based on mutual agreements between the service providers conforming to the Orders/Regulations/Guidelines issued by the TRAI from time to time.	
27.3	<del>-----</del>	<u>Has been dealt with under Clause 26.2</u>

**Deleted:** The network resources including the cost of upgrading/modifying interconnecting networks to meet the service requirements of the LICENSEE will be mutually negotiated keeping in view the orders and regulations issued by the TRAI from time to time.

